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LONG RANGE FACILITIES PLAN 2018 UPDATE Sooke School District

June 2018

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This report is written in the third person plural. 'We' refers to Matrix Planning Associates.

SUMMARY

School District Growth Prospects

The Sooke School District (SSD) is a rapidly growing part of the Capital Regional District (CRD) comprising Langford, Colwood, Sooke, Metchosin, Highlands and the Juan de Fuca Electoral Area. Most growth over the next decade will occur in Langford, Colwood and Sooke.

We estimate that enrolment in SSD schools will increase by 37% from 9,861 in 2017 to 13,550 eleven years later in 2028. That is a total increase of 3,689 students or about 335 new students each year. There will be relatively more growth in the secondary grades than in the middle and elementary grades.

Anticipated Need for Space

The capacity utilization of SSD schools already exceeds 100% (the 2017 enrolment of 10,308 students compared with the overall operational capacity of 9,524 spaces) and will increase to 135% by 2028. This is even after assuming completion of the approved 600-space expansion to Royal Bay Secondary. Currently, SSD has deployed 51 portable classrooms to alleviate overcrowding in many schools. The scale of temporary accommodation for SSD schools will grow until the proposed new and expanded schools have been provided.

With the goal of operating at 95-100% capacity utilization, the emerging facilities plan for SSD indicates that a total of nearly 3,500 new spaces must be provided over the next few years. Since the plan calls for much of the required new spaces to be built as seven new schools on new sites, there is an urgent need to secure property for some of these proposed new schools.

Emerging Plan for Secondary and Middle Schools

The plan for SSD secondary schools is to:

- ▶ Expand Royal Bay Secondary by 600 spaces. We have assumed this will be accomplished by 2020.
- ▶ Build a new secondary school in the Westshore area with an initial capacity of 800 spaces and substantial expansion capability. Acquiring a site for this large project is a high priority.
- ▶ Expand Edward Milne Secondary.

The plan for SSD middle schools is to:

- ▶ Build a new 700-space middle school in the Westshore area. A site has been acquired for this project. This site will be shared with the proposed West Langford Elementary.
- ▶ Expand Journey Middle.
- ▶ Expand Dunsmuir Middle.
- ▶ Modernize and expand Spencer Middle.

Emerging Plan for Elementary Schools

We have organized the plan for elementary schools into three geographic areas: Sooke, Westshore north of the highway, and the remainder of Westshore.

The plan for elementary schools in the Sooke area is to:

- ▶ Build a new 396-space Sooke River Elementary on a site already acquired at Sunriver Estates.
- ▶ Replace Sooke Elementary with a larger new school.
- ▶ Replace or renovate and, possibly expand, John Muir Elementary.

The plan for elementary schools in the area north of the Trans-Canada Highway is to:

- ▶ Build a new 396-space North Langford Elementary on a site that has already been acquired.
- ▶ Replace Millstream Elementary with a new and larger school.

The emerging facilities plan for elementary schools in the part of Westshore south of the Trans-Canada Highway is to:

- ▶ Build a new 396-space West Langford Elementary on a site already acquired. This site will be shared with the proposed new middle school.
- ▶ Build a new 396-space South Langford Elementary on a new site to be acquired on or near Latoria Road. SSD is actively pursuing property options for this site.
- ▶ Build a new Royal Bay Elementary on a site designated as part of the Royal Bay development. This site has not yet been acquired.
- ▶ Replace Savory Elementary with a new and larger school.
- ▶ Replace Sangster Elementary with a new and possibly larger school.
- ▶ Modernize Willway, Ruth King, Wishart and Hans Helgesen elementary schools.

Top Priorities

The most pressing facilities needs for SSD are to:

- ▶ Build the new middle school and the new West Langford Elementary on a site already acquired.
- ▶ Acquire a site and build the new South Langford Elementary.
- ▶ Acquire a site for a new secondary school in Westshore.
- ▶ Build the new North Langford Elementary on a site already acquired.
- ▶ Build the new Sooke River Elementary on a site already acquired.
- ▶ Replace Millstream Elementary with a new and larger school.

1. INTRODUCTION

1.1 ORGANIZATION OF SCHOOLS

As illustrated in Figure 1 on the next page, students in the Sooke School District (SSD) move from elementary school to middle school in Grade 6, and from middle school to secondary school in Grade 9. The only exception is John Stubbs which is a K-8 single track French Immersion school drawing students from across the district. In addition to John Stubbs, French Immersion is offered as a dual track program at Poirier, Millstream, Journey and Belmont.

SSD has a total of 24 community schools. There are 17 K-5 elementary schools, three 6-8 middle schools, one K-8 school (John Stubbs) and three 9-12 secondary schools.

The addition of the new schools proposed in this long range plan will necessitate changes to catchment boundaries, revisions to the flow of students into middle and secondary, and modifications to the French Immersion program.

1.2 GEOGRAPHY OF THE SOOKE SCHOOL DISTRICT

SSD comprises six local government entities — City of Colwood, City of Langford, District of Highlands, District of Metchosin, District of Sooke and the Juan de Fuca Electoral Area (including East Sooke and Port Renfrew). As illustrated in Figure 2, the area from west of Sooke to Port Renfrew is very thinly populated. In addition, the area between Sooke and Langford is relatively underdeveloped. Much of the population in SSD lives in Langford and Colwood. Colwood, Langford, Highlands and Metchosin are collectively known as the Westshore.

SSD shares boundaries with three other school districts:

- ▶ School District 79 (Cowichan Valley) is to the north.
- ▶ School District 63 (Saanich) is to the northeast.
- ▶ School District 61 (Greater Victoria) is to the east.

Figure 3 shows the locations for six of the seven community schools in the Sooke Zone. The school in Port Renfrew is more than an hour's drive from Sooke.

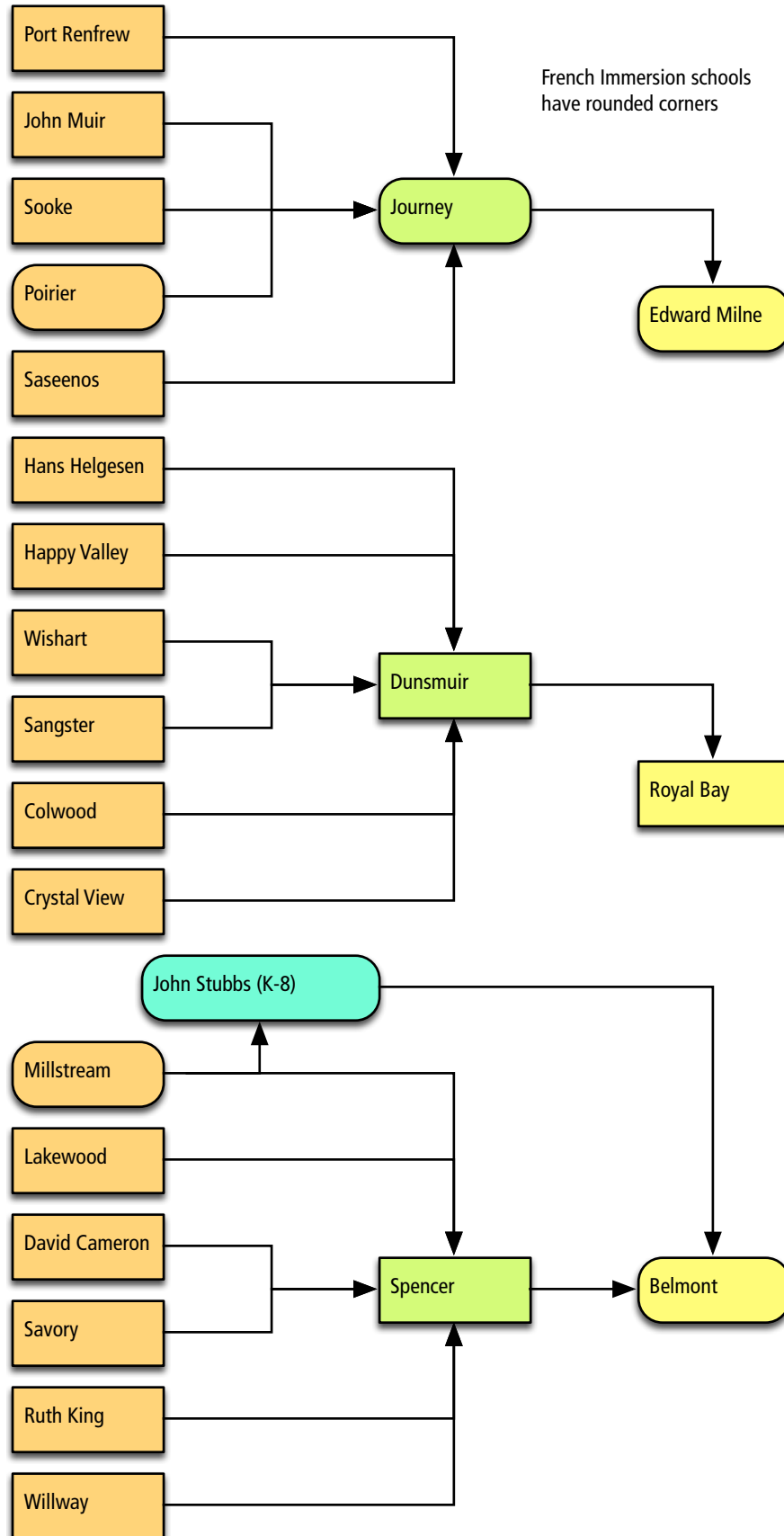
Figure 4 shows the locations for 16 of the 17 community schools in the Westshore Zone. Hans Helgesen Elementary in Metchosin is off the map to the southwest.

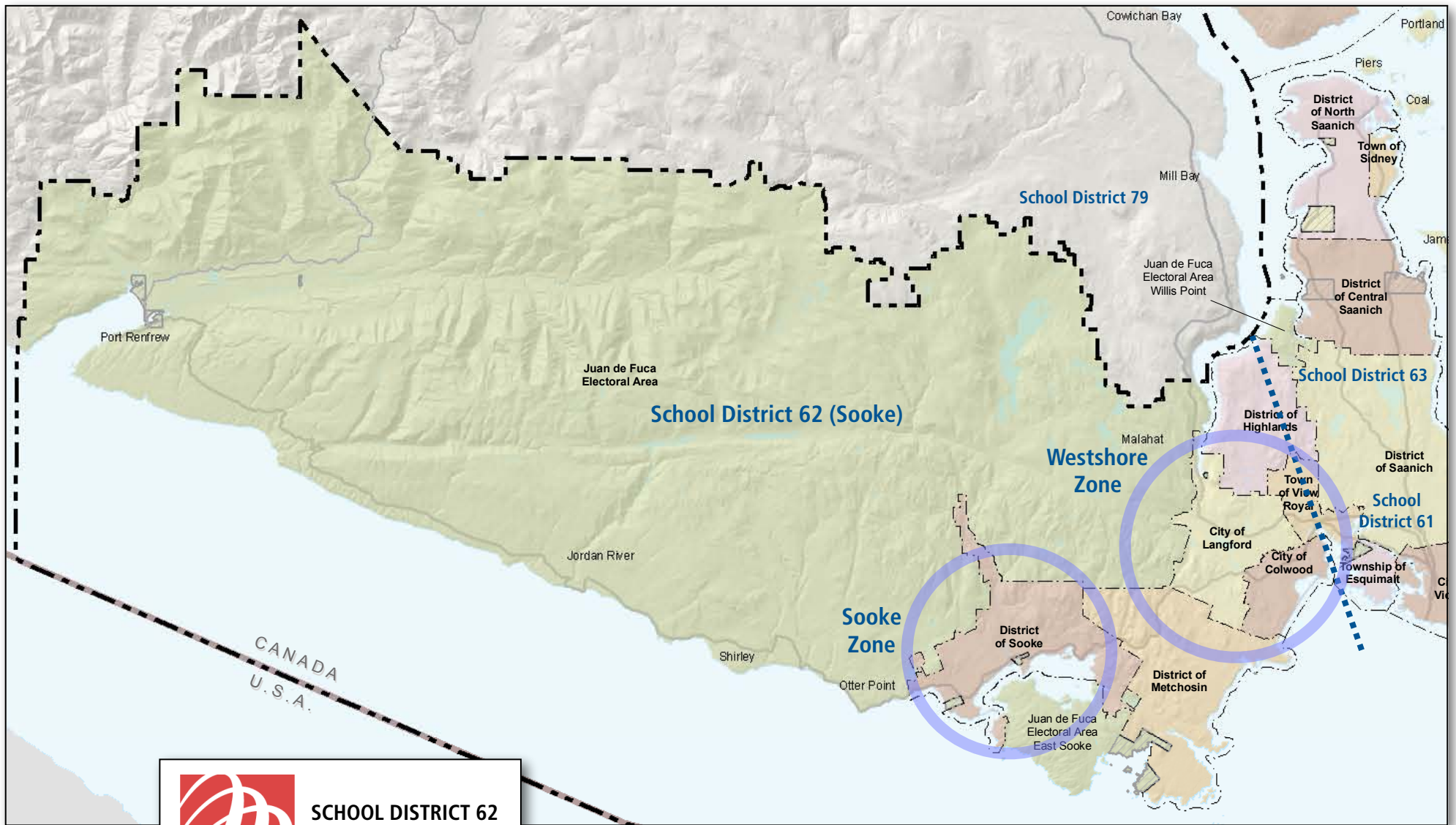

1.3 PREVIOUS PLANNING STUDIES

This update of SSD's long range facilities plan is the latest of a series of district-wide planning studies conducted by the rapidly growing school district:

- ▶ Long Range Facilities Plan, 2016 Update, Cascade Facilities Management Consultants, September 2016.
- ▶ District Facilities Plan, 2010 Update, Matrix Planning Associates, February 2011.
- ▶ Long Range Facilities Plan, 2007 Update, Matrix Planning Associates, May 2007.
- ▶ Long Range Facilities Plan, Matrix Planning Associates, May 2005.

Figure 1: Flow of Students in SSD Schools



**SCHOOL DISTRICT 62
(SOOKE) IN CONTEXT**

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Figure 2

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The base map is from the Capital Regional District.

The eastern boundary (shown in blue) is notional. School District 62 includes Langford, Colwood, Sooke, Metchosin, Highlands and the Juan de Fuca Electoral Area. View Royal is part of School District 61.



- 2. Edward Milne Secondary
- 6. Westshore-Sooke Learning Centre
- 8. Journey Middle
- 15. John Muir Elementary
- 19. Poirier Elementary
- 20. Port Renfrew Elementary (not shown)
- 23. Saseenos Elementary
- 25. Sooke Elementary

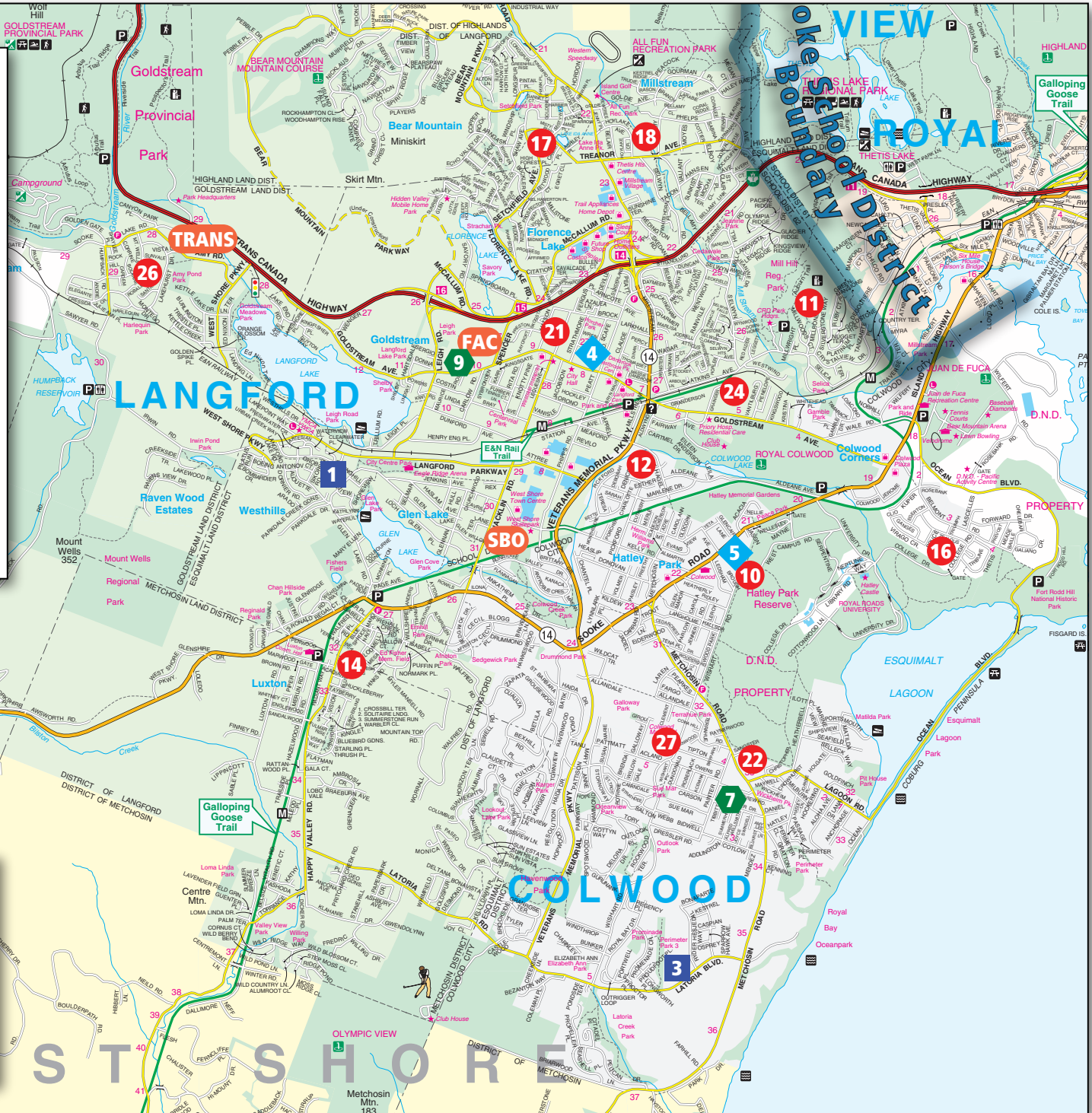


SOOKE ZONE

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Figure 3

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1. Belmont Secondary
3. Royal Bay Secondary
4. Westshore Centre for Learning
5. Westshore Colwood Campus
7. Dunsmuir Middle
9. Spencer Middle
10. Colwood Elementary
11. Crystal View Elementary
12. David Cameron Elementary
13. Hans Helgesen Elementary (not shown)
14. Happy Valley Elementary
16. John Stubbs Elementary-Middle
17. Lakewood Elementary
18. Millstream Elementary
21. Ruth King Elementary
22. Sangster Elementary
24. Savory Elementary
26. Willway Elementary
27. Wishart Elementary



**WESTSHORE
ZONE**

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Figure 4

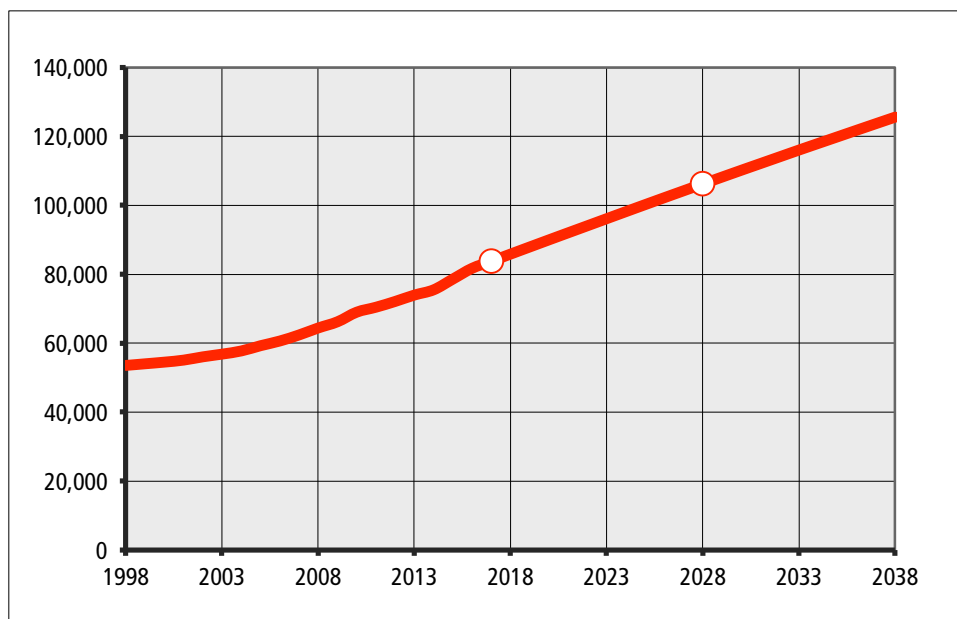
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2. EXISTING SITUATION

2.1 COMMUNITY CONTEXT

As illustrated in Figure 5, SSD is a highly dynamic area that has grown by a third over the past decade and has the capacity to continue to expand well into the future. The BC Statistics population projection shown in Figure 5 indicates that there will be 27% more people living in SSD in 2028 than in 2017, our base year for estimating future enrolment.

Figure 5: Population Projection for Sooke School District



Most of the population growth will continue to be in Langford, Colwood and Sooke.

There are no significant impediments to future growth in these three municipalities. For example, major new roads have been completed and there is still land available for development. There may be some constraints on development in Sooke and Colwood due to the limited availability of sewers. Nevertheless, the potential for future growth in SSD's communities is substantial and long term.

2.2 SCHOOL CAPACITIES

Figure 6 indicates that SSD's community based schools have a total operational capacity of 9,524 spaces with 4,774 spaces in elementary schools, 2,100 spaces in middle schools and 2,650 spaces in secondary schools. The middle school total includes 275 spaces in John Stubbs Elementary-Middle. The elementary capacities include the recently added modular classrooms at Hans Helgesen, Poirier, Sangster, Sooke, Willway and Wishart. One classroom has been deducted from the capacities of the following six elementary schools where the StrongStart

program occupies a classroom: Colwood, Hans Helegsen, John Muir, Millstream, Ruth King and Willway.

Figure 6: SSD School Capacities

School	Grade Span	Modules	Nominal Capacity	Operational	2017 Enrolment	Utilization	Portables
Colwood	K 5	9	215	198	187	94%	
Crystal View	K 5	13	310	286	245	86%	
David Cameron	K 5	16	385	352	353	100%	2
Hans Helegsen	K 5	10	240	220	192	87%	
Happy Valley	K 5	16	380	352	418	119%	2
John Muir	K 5	9	215	198	192	97%	
Lakewood	K 5	16	380	352	439	125%	3
Millstream	K 5	9	215	198	253	128%	2
Poirier	K 5	17	410	374	379	101%	2
Port Renfrew	K 5	3	75	66	11	17%	
Ruth King	K 5	13	315	286	277	97%	
Sangster	K 5	9	220	198	239	121%	
Saseenos	K 5	8	195	176	128	73%	
Savory	K 5	8	190	176	193	110%	1
Sooke	K 5	12	290	264	306	116%	2
Willway	K 5	11	270	242	179	74%	
Wishart	K 5	16	390	352	326	93%	1
John Stubbs	K 8	33	805	759	724	95%	
Dunsmuir	6 8	24	600	600	745	124%	13
Journey	6 8	23	575	575	516	90%	1
Spencer	6 8	26	650	650	752	116%	7
Edward Milne	9 12	26	650	650	593	91%	3
Belmont	9 12	48	1,200	1,200	1,235	103%	2
Royal Bay	9 12	56	800	800	979	122%	10
SSD Totals	K 12	431	9,975	9,524	9,861	104%	51
Elementary	K 5	217	5,225	4,774	4,817	101%	15
Middle	6 8	84	2,100	2,100	2,237	107%	21
Secondary	9 12	130	2,650	2,650	2,807	106%	15

The following notes explain the each of the columns in Figure 6:

- ▶ Grade Span: K is kindergarten and the numbers refer to the grades.
- ▶ Modules: The total number of classrooms in elementary schools, and the equivalent in middle and secondary schools.
- ▶ Nominal Capacity: MoE applies a 'nominal' capacity of 25 for all classrooms except 20 students to classrooms designated for kindergarten.

- ▶ **Operational:** The operational capacity is based on average class sizes of 25 for Grades 4-12, 21 for Grades 1-3 and 19 for kindergarten. We have calculated the operational capacities of K-5 elementary schools by multiplying the number of modules by 25 and then multiplying the total by 88% $((19+63+50)/150)$.
- ▶ **2017 Enrolment:** The enrolment in September 2017 not including International students.
- ▶ **Utilization:** Capacity utilization of the school as of 2017 is calculated by dividing the enrolment by the operational capacity.
- ▶ **Portables:** The number of portable classrooms at each school as of June 2018.

Figure 7 outlines the operational capacities for K-5 elementary schools based on the number of modules (classrooms). When the number of modules are divisible by six, the school has an equal distribution of classes per grade.

Figure 7: Operational Capacities of K-5 Schools

Modules	Operational	Modules	Operational	Modules	Operational
7	154	13	286	19	418
8	176	14	308	20	440
9	198	15	330	21	462
10	220	16	352	22	484
11	242	17	374	23	506
12	264	18	396	24	528

We have shown the current 2018 capacity of Royal Bay Secondary as 800 spaces. We assume that the approved 600-space addition is completed in our analysis of future capacity utilization (the current capacity of 800 spaces will increase to 1,400 spaces).

For both educational and operational reasons, SSD prefers schools within the following optimal operational capacity ranges:

- ▶ Secondary schools of 900-1,200 spaces — four grades (Grade 9 to 12) with nine to twelve classes per grade. Smaller schools are not able to offer a full range of options.
- ▶ Middle schools of 450-600 spaces — three grades (Grade 6 to 8) with six to eight classes per grade. Smaller school are less efficient.
- ▶ Elementary schools of 264-396 spaces — six grades (Kindergarten to Grade 5) with two or three classes per grade. An elementary school with three classes per grade and an operational capacity of 396 students is perhaps an ideal size. Smaller elementary schools are less efficient to operate.

Schools that are somewhat larger than the specified maximum optimum capacities are acceptable. For example, Royal Bay Secondary will be 1,400 spaces after the approved addition is completed.

2.3 TEMPORARY ACCOMMODATION

As indicated in Figure 6, one of the primary strategies SSD is using to cope with overcrowding has been to install 51 portable classrooms at 14 schools. Until the proposed new schools are implemented, SSD will continue to require many portable classrooms. The provision of this temporary accommodation is a major financial challenge since the costs associated with portable classrooms is funded from SSD's operating budget.

2.4 PHYSICAL CONDITION OF SCHOOL FACILITIES

The building condition ratings presented in Figure 8 characterizes the condition of each SSD school facility in terms of the need to invest in upgrading or replacement over the next several years. The goal is to make the necessary investments to bring all schools to modern standards of health, safety, energy efficiency and functionality. The schools listed in Figure 8 are organized into four groups according to relative building condition: excellent, good, adequate and poor.

The seven schools rated as 'excellent' are new or nearly new and not likely to require upgrading over the next several years. Similarly, the five schools characterized as being in 'good' condition are unlikely to require significant investment in upgrading or functional renovations beyond routine maintenance.

The six school facilities characterized as 'adequate' have considerable useful life remaining, but will require modernization. SSD can expect to invest in upgrading these schools over the next several years.

The six schools with 'poor' building condition ratings likely require replacement, although detailed technical assessments would be required to confirm this preliminary conclusion. SSD's last capital plan proposed replacement for Sooke and Millstream. One of the key challenges to SSD will be to replace or otherwise deal with the six schools with building condition rated as 'poor'.

The following notes explain the each of the columns in Figure 8:

- ▶ Subjective Condition Assessment: An assessment by SSD facilities personnel of the overall condition of the building considering FCI (Facility Condition Index), seismic issues and other factors.
- ▶ Potential to Expand Site: An assessment by SSD facilities personnel of how readily the school could be physically expanded.
- ▶ Facility Condition Index (FCI): VFA Canada's March 2018 rating. FCI is calculated by dividing the cost to remedy maintenance deficiencies by the replacement value of the facility. Larger values indicate more deficient buildings.
- ▶ Year Built: The year the main portion of the school was constructed.
- ▶ Site Area: The area of the school site in hectares.
- ▶ Floor Area: The gross floor area of the facility in square metres.

Figure 8: Building Condition of SSD Schools

School	Subjective Condition Assessment	Potential to Expand Site	Facility Condition Index	Year Built	Site Area	Floor Area	Notes
Belmont	Excellent	Good	0.00	2016	4.2	11548	
Royal Bay	Excellent	Good	0.00	2016	6.3	12145	More area being acquired
John Stubbs	Excellent	Good	0.02	2008	5.3	7160	
Happy Valley	Excellent	Poor	0.05	2006	1.7	2933	
Crystal View	Excellent	Poor	0.05	2004	2.0	2563	
Poirier	Excellent	Good	0.19	2001	3.5	3165	
Colwood	Excellent	Good	0.09	2002	3.6	2403	Excluding Colwood Annex
Journey	Good	Adequate	0.06	1993	11.3	6208	
Lakewood	Good	Poor	0.14	1994	1.8	3339	
David Cameron	Good	Adequate	0.15	1995	2.6	3932	
Edward Milne	Good	Adequate	0.19	1996	4.6	8981	Proposed envelope upgrade
Hans Helegsen	Good	Adequate	0.23	1992	3.0	2369	
Dunsmuir	Adequate	Poor	0.26	1965	3.7	7408	Recent upgrades
John Muir	Adequate	Adequate	0.30	1970	2.0	2262	
Wishart	Adequate	Good	0.35	1971	2.9	3538	
Spencer	Adequate	Poor	0.36	1977	4.5	8000	
Ruth King	Adequate	Good	0.36	1948	2.8	4009	Approved envelope upgrade
Willway	Adequate	Good	0.40	1977	2.7	2757	Proposed seismic upgrade
Savory	Poor	Poor	0.38	1966	2.0	2028	
Port Renfrew	Poor	Good	0.33	1970	2.3	1345	
Sangster	Poor	Poor	0.33	1958	1.7	1975	
Saseenos	Poor	Poor	0.48	1959	1.8	2145	
Sooke	Poor	Good	0.52	1959	2.7	2639	Proposed replacement
Millstream	Poor	Poor	0.53	1959	2.1	2218	Proposed replacement
Totals/Averages	6 Poor	9 Poor	0.24	1983	81.1	107071	

We have not included assessments of seismic risk as a part of this analysis since the Province is currently re-assessing the seismic upgrading of public buildings. In addition, SSD has upgraded most buildings with the highest seismic risk designations. SSD facilities personnel considered the remaining seismic mitigation projects when assigning the overall subjective condition assessment.

3. ENROLMENT FORECAST

3.1 APPROACH TO ENROLMENT FORECASTS

SSD receives annual updated enrolment forecasts for each school from Baragar Systems. Baragar's base 15-year projection uses previous enrolments, childcare credit data, and other relevant information to generate enrolment projections that Baragar characterizes as 'without local knowledge'. For the 2018 Update, we used the latest Baragar projections that were based on actual enrolments from September 2017 and provided annual estimates of enrolment for each school to 2032.

We generated charts for each school showing Baragar's base projection as well as forecasts from the 2010 Update and the 2016 Update. We also estimated the number of students from new residential developments that would be attending each school. We then created new forecasts building on the Baragar base projection and reviewed those forecasts with SSD officials before determining the new best enrolment forecasts for each school.

The new best enrolment forecasts for each SSD school are presented in charts in Appendix A and summarized in a table in Appendix B. The Appendix A charts indicate the best enrolment forecasts with a red line labelled 'Adjusted'. The enrolment forecasts are headcounts for fully funded K-12 students. They do not include international students.

Our objective in developing these enrolment forecasts was to be as accurate as possible. We did not introduce any contingencies — our enrolment forecasts are as likely to prove to be too high as too low.

We tried not to be influenced by capacity limitations. Our forecasts estimate the number of students who live in the catchment area of each school. In many cases, SSD officials will manage enrolment demand by shifting students to nearby schools as well as by adding portable classrooms to temporarily add capacity to schools in growth areas.

3.2 FUTURE RESIDENTIAL DEVELOPMENT

As summarized in Figure 9, we estimate that approximately 10,800 new housing units will be built in SSD municipalities over the next eleven years. We obtained these estimates in consultation with planners in Langford, Colwood and Sooke. Our estimates for Highlands, Metchosin and the Juan de Fuca Electoral Area were based on a continuation of the past.

In Figure 9, 'SD' is single detached, 'TH' is townhouse and 'AP' is apartment. About 40% of the anticipated new housing will be single detached houses with 24% as townhouse units and 36% apartments. Most new housing in Sooke, Highlands, Metchosin and Juan de Fuca will be single detached, while apartments will be the dominant housing type in Colwood and Langford.

We have listed individual developments with more than 300 units. All other developments are included in the 'other' category. The annual average number of units is shown in blue. All estimates have been rounded to the nearest ten.

The estimates for Sooke could be higher if the proposed sewer expansion is approved soon. The estimates for Colwood are higher than historic averaged due primarily to accelerated implementation of Royal Bay.

Figure 9: Summary of Estimated Future Housing Units to 2028

Municipality	Development	Total	SD	TH	AP
Langford	Bear/Skirt Mountain	1,150	430	120	600
	Westhills	1,200	450	500	250
	Other	3,690	1,220	700	1,770
	Total, Langford	6,040	2,100	1,320	2,620
	Annual average	549	191	120	238
Colwood	Royal Bay	950	570	380	
	Colwood Corners	380			380
	Nob Hill	380			380
	Other	590	130	120	340
	Total, Colwood	2,300	700	500	1,100
	Annual average	209	64	45	100
Sooke	Sunriver	300	200	100	
	Other	1,400	750	500	150
	Total, Sooke	1,700	950	600	150
	Annual average	155	86	55	14
Other	Highlands	170	120	50	
	Metchosin	100	100		
	Juan de Fuca	490	330	90	70
	Total, Other	760	550	140	70
	Annual average	69	50	13	6
Total SSD	Total, SSD	10,800	4,300	2,560	3,940
	Annual average	982	391	233	358

Figure 10 compares the average number of housing starts over the past eleven years with the average annual number of housing units estimated over the next eleven years. The future estimates resemble the past except that the Langford forecast is slightly less than the past, while the forecast for Colwood is higher than the past.

Figure 10: Average Housing Units Over Eleven Years

Area	Past	Future
Langford	602	549
Colwood	125	209
Sooke	146	155
Other	68	69
Total SSD	942	982

Our estimate of future housing units is in keeping with growth over the past. In fact, Figure 11 illustrates an acceleration of housing starts over the past few years. Furthermore, while we are not sure of the pace of development over the next decade, the municipalities within SSD have the capacity to accommodate significant growth, and much of the future population growth in the Capital Regional District will occur in Langford, Colwood and Sooke.

Figure 11: Past Housing Starts

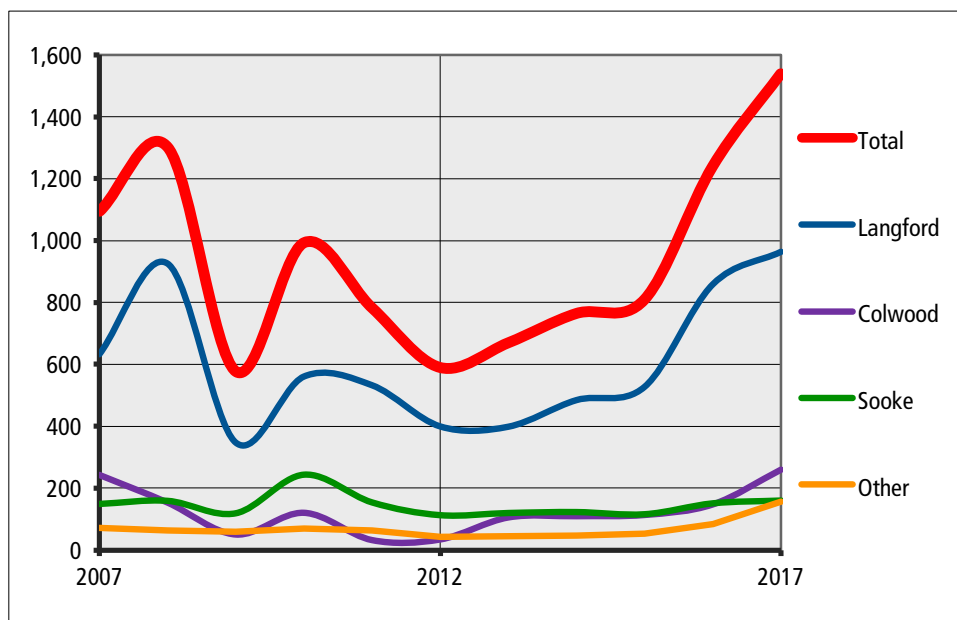
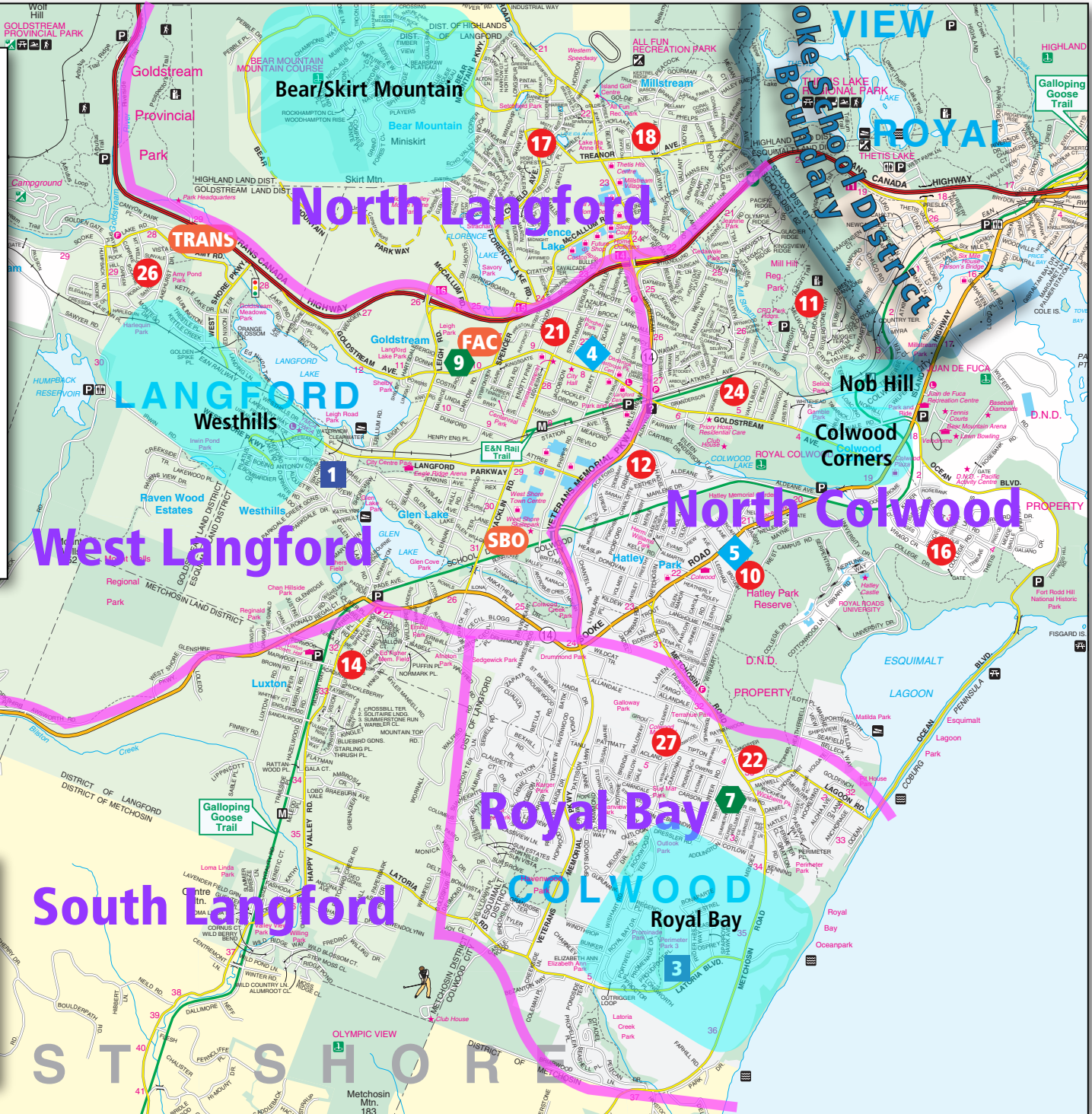


Figure 12 shows the locations of the major residential developments in the Westshore Zone. Note that there is considerable new housing being built in the areas outside the identified major developments, especially in Langford (the 'other' category in Langford and Colwood accounts for more than half of the total estimated number of units for the two municipalities). Also, the density is increasing in many existing mature neighbourhoods due to extensive infill development.

Figure 12 also shows a notional division of the Westshore into five zones that we reference later in the formulation of a plan for new schools in the area.

1. Belmont Secondary
3. Royal Bay Secondary
4. Westshore Centre for Learning
5. Westshore Colwood Campus
7. Dunsmuir Middle
9. Spencer Middle
10. Colwood Elementary
11. Crystal View Elementary
12. David Cameron Elementary
13. Hans Helgesen Elementary (not shown)
14. Happy Valley Elementary
16. John Stubbs Elementary-Middle
17. Lakewood Elementary
18. Millstream Elementary
21. Ruth King Elementary
22. Sangster Elementary
24. Savory Elementary
26. Willway Elementary
27. Wishart Elementary




**WESTSHORE
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DEVELOPMENT**

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Figure 12

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3.3 YIELD FACTORS

As outlined in Figure 13, we estimate that 3,671 SSD students will be living in new housing by 2028. The estimated number of housing units is drawn from Figure 9.

Yield factors are the number of SSD students (K-12) that come from specific housing types. These yield factors do not include students at private schools. The yield rates assigned to each development in Figure 13 range from 0.42 to 0.55 for single detached houses, 0.32 to 0.40 for townhouses, and 0.12 to 0.24 for apartments. The yield rates assigned were based on information from several sources, including a study of specific existing housing areas in SSD documented in the 2010 and 2007 Updates.

Figure 13: Estimated Number of SSD Students Living in New Housing

Development	Housing Units			Yield Rate			Estimated Students			
	SD	TH	AP	SD	TH	AP	SD	TH	AP	Total
Bear/Skirt Mountain	430	120	600	0.42	0.32	0.15	181	38	90	309
Westhills	450	500	250	0.50	0.37	0.18	225	185	45	455
Other, Langford	1,220	700	1,770	0.48	0.38	0.15	586	266	266	1,118
Royal Bay	570	380		0.46	0.35		262	133		395
Colwood Corners			380			0.12			46	46
Nob Hill			380			0.15			57	57
Other, Colwood	130	120	340	0.48	0.34	0.14	62	41	48	151
Sunriver	200	100		0.52	0.38		104	38		142
Other, Sooke	750	500	150	0.55	0.38	0.24	413	190	36	639
Highlands	120	50		0.50	0.38		60	19		79
Metchosin	100			0.48			48			48
Juan de Fuca	330	90	70	0.55	0.40	0.20	182	36	14	232
Total, SSD	4,300	2,560	3,940	0.49	0.37	0.15	2,123	946	602	3,671

3.4 OVERALL ENROLMENT FORECASTS

The heavy blue line labelled 'Best' in Figure 14 shows our enrolment forecast for the combination of all SSD community based schools. The Best forecast indicates enrolment will increase by 37% from 9,861 in 2017 to 13,550 eleven years later in 2028. That is a total increase of 3,689 students or about 335 new students each year. This total number of new students is close to the 3,940 students estimated to be living in new housing as outlined in Figure 9.

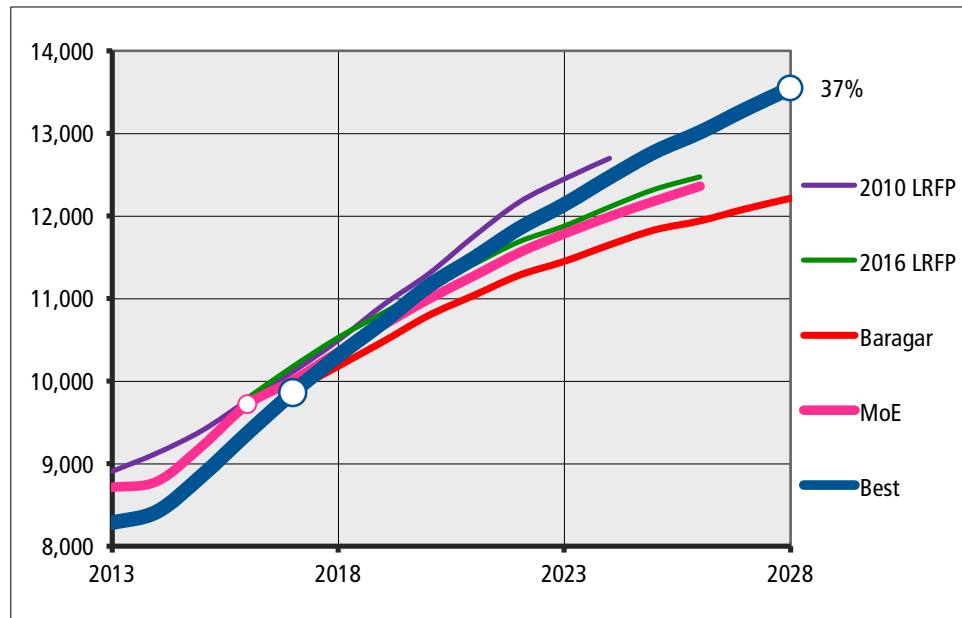
The other four forecasts presented in Figure 14 are:

► **2010 LRFP**

The forecast for SSD schools presented in the 2010 Update of the Long Range Facilities Plan (shown with a thinner purple line). This estimate of future enrolment is a bit higher than our current forecast, but with a similar trajectory.

- ▶ **2016 LRFP**
The forecast for SSD schools presented in the 2016 Update of the Long Range Facilities Plan (shown with a thinner green line). This projection parallels our current forecast for the first few years and then tapers off slightly in the longer term.
- ▶ **Baragar**
The ‘without local knowledge’ enrolment projection for all SSD schools from Baragar Systems that we refer to as ‘Baragar base’. At 2028, the cumulative impact of our adjustments to Baragar’s base projection for individual schools is to add 1,330 more students to SSD schools.
- ▶ **MoE**
The Ministry of Education’s latest forecast for SSD (shown as a pink line). Note that MoE’s starting point in 2016 is a little higher than our enrolment for 2016 since the MoE includes students in alternate programs.

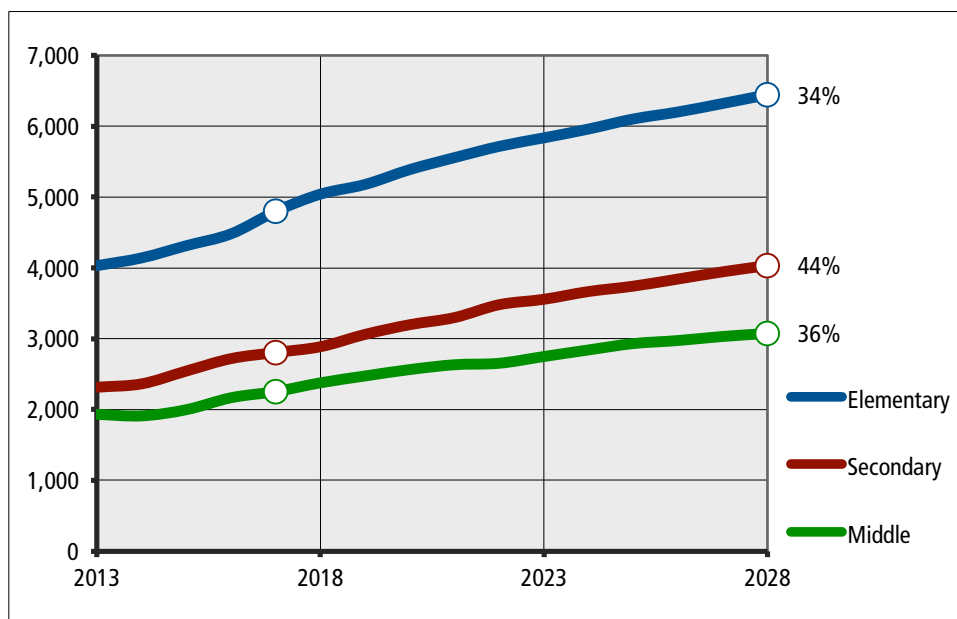
Figure 14: Enrolment Forecast for SSD Schools



The fact that our current overall enrolment forecast is very close to the enrolment forecasts that provided the base for the 2016 and 2010 Updates to SSD’s Long Range Facilities Plan reinforces the consistency and accuracy of SSD’s overall enrolment forecasts since SSD first began to produce long range plans in 2005.

Figure 15 illustrates that there will be relatively more growth in the secondary grades than in the middle and elementary grades.

Figure 15: Enrolment Forecast by Level



3.5 LONG-TERM ENROLMENT PROSPECTS

Our enrolment forecasts present reasonable estimates of SSD students over the next eleven years. Focusing on the next decade is appropriate for capital and operational planning for SSD schools. However, it is likely that growth in Westshore and Sooke will continue at a similar pace for the foreseeable future, and that enrolment at SSD schools will continue to increase in the decade after 2028. We have kept this continued growth in mind when formulating the plans for future building projects.

4. BASELINE CAPACITY UTILIZATION

4.1 INTRODUCTION TO CAPACITY UTILIZATION

Capacity utilization is determined by dividing enrolment by the operational capacity for each school. The result is expressed as a percentage.

It is important for SSD to maintain high utilization levels to reduce overall operating costs and advance the objective of having the best school facilities possible available for all students. On the other hand, schools cannot operate effectively with more students than spaces available, and using portable classrooms is a temporary solution only.

We used the following utilization thresholds as targets in developing the emerging facilities plan for SSD:

- ▶ Overall utilization levels of 95-99% especially considering that MoE expects school districts to maintain overall utilization levels of at least 95%.
- ▶ Elementary and middle schools at 90-100%.
- ▶ Secondary schools at 95-104% since many school administrators have found that secondary schools, especially larger secondary schools, can operate satisfactorily with utilization levels that slightly exceed 100%.

4.2 BASELINE UTILIZATION ANALYSIS

The Baseline Capacity Utilization Profile presented in Figure 16 shows enrolment and utilization as of 2018, 2023 and 2028. It provides a framework for testing the impact of various interventions such as new schools, expanded schools and catchment adjustments. The enrolment numbers used in the Baseline Utilization Profile are summarized in Appendix B. The operational capacities for SSD schools are summarized in Figure 6.

The following notes clarify and expand on the Baseline Utilization Profile presented in Figure 16:

- ▶ Space shortages are shown in red when greater than 20 spaces.
- ▶ Capacity utilization levels are shown in red when 110% and greater.
- ▶ FI refers to schools with French Immersion.
- ▶ We have kept the capacity of Royal Bay Secondary at 800 spaces for the 2018 analysis, but increased it to 1,400 spaces for the 2023 and 2028 calculations, assuming the approved 600 space additional will be implemented soon.
- ▶ We have divided John Stubbs capacity into 275 middle spaces and 484 elementary spaces. We have estimated a third of the enrolment at John Stubbs to be in middle grades.
- ▶ We have excluded Port Renfrew Elementary from the calculation of capacity utilization for what is otherwise an essentially urban school district.

Figure 16: Baseline Capacity Utilization Profile

School	Capacity	K-12 Enrolment			Surplus or Shortage			Capacity Utilization			Notes	
		2018	2023	2028	2018	2023	2028	2018	2023	2028		
A	John Muir	198	215	254	272	-17	-56	-74	109%	128%	137%	
	Sooke	264	335	364	415	-71	-100	-151	127%	138%	157%	
	Poirier	374	402	442	482	-28	-68	-108	107%	118%	129%	FI
	Saseenos	176	135	156	161	41	20	15	77%	89%	91%	
	Journey	575	540	590	686	35	-15	-111	94%	103%	119%	FI
	Edward Milne	650	584	665	748	66	-15	-98	90%	102%	115%	FI
B	Millstream	198	254	279	299	-56	-81	-101	128%	141%	151%	FI
	Lakewood	352	467	533	593	-115	-181	-241	133%	151%	168%	
C	Hans Helegsen	220	204	229	240	16	-9	-20	93%	104%	109%	
	Happy Valley	352	445	628	714	-93	-276	-362	126%	178%	203%	
D	Willway	242	192	232	283	50	10	-41	79%	96%	117%	
	Ruth King	286	283	292	313	3	-6	-27	99%	102%	109%	
	David Cameron	352	385	447	536	-33	-95	-184	109%	127%	152%	
	John Stubbs	759	783	998	1,057	-24	-239	-298	103%	131%	139%	K-8 single track FI
E	Wishart	352	329	378	396	23	-26	-44	93%	107%	113%	
	Sangster	198	245	249	290	-47	-51	-92	124%	126%	146%	
	Colwood	198	183	187	204	15	11	-6	92%	94%	103%	
F	Crystal View	286	235	239	252	51	47	34	82%	84%	88%	
	Savory	176	200	250	274	-24	-74	-98	114%	142%	156%	
	Spencer	650	792	929	1,043	-142	-279	-393	122%	143%	160%	
	Dunsmuir	600	784	897	996	-184	-297	-396	131%	150%	166%	
	Royal Bay	800	1,054	1,236	1,383	-254	164	17	132%	88%	99%	Capacity 1,400 for 2023/28
	Belmont	1,200	1,250	1,656	1,901	-50	-456	-701	104%	138%	158%	FI
	SSD Totals	9,458	10,296	12,130	13,538	-838	-2,072	-3,480	109%	121%	135%	Excluding Port Renfrew
	Elementary	4,708	5,031	5,824	6,429	-323	-1,116	-1,721	107%	124%	137%	5 new schools indicated
	Middle	2,100	2,377	2,749	3,077	-277	-649	-977	113%	131%	147%	1 new school plus expansions
	Secondary	2,650	2,888	3,557	4,032	-238	-307	-782	109%	109%	124%	Capacity plus 600 for 2023/28
	Sooke Zone	2,237	2,211	2,471	2,764	26	-234	-527	99%	110%	124%	Excluding Port Renfrew
	Westshore Zone	7,221	8,085	9,659	10,774	-864	-1,838	-2,953	112%	124%	138%	Capacity plus 600 for 2023/28
	A-Elementary	1,012	1,087	1,216	1,330	-75	-204	-318	107%	120%	131%	Excluding Port Renfrew
	B-Elementary	550	721	812	892	-171	-262	-342	131%	148%	162%	Lakewood, Millstream
	C-Elementary	572	649	857	954	-77	-285	-382	113%	150%	167%	Helegsen, Happy Valley
	D-Elementary	1,364	1,382	1,636	1,837	-18	-272	-473	101%	120%	135%	Willway, King, Cameron, Stubbs
	E-Elementary	748	757	814	890	-9	-66	-142	101%	109%	119%	Wishart, Sangster, Colwood
	F-Elementary	462	435	489	526	27	-27	-64	94%	106%	114%	Crystal, Savory

Shortage shows as red if greater than 20

Capacity utilization shows as red if 110% or greater

As illustrated in Figure 17, the capacity utilization of SSD schools already exceeds 100% and will increase to 135% in ten years. The anticipated increase in utilization for the secondary schools will increase by only 124% due to the pending addition of 600 spaces to Royal Bay Secondary. The largest anticipated increase in utilization is for the middle schools that escalate from 113% to 147% by 2028.

Figure 17: Baseline Capacity Utilization

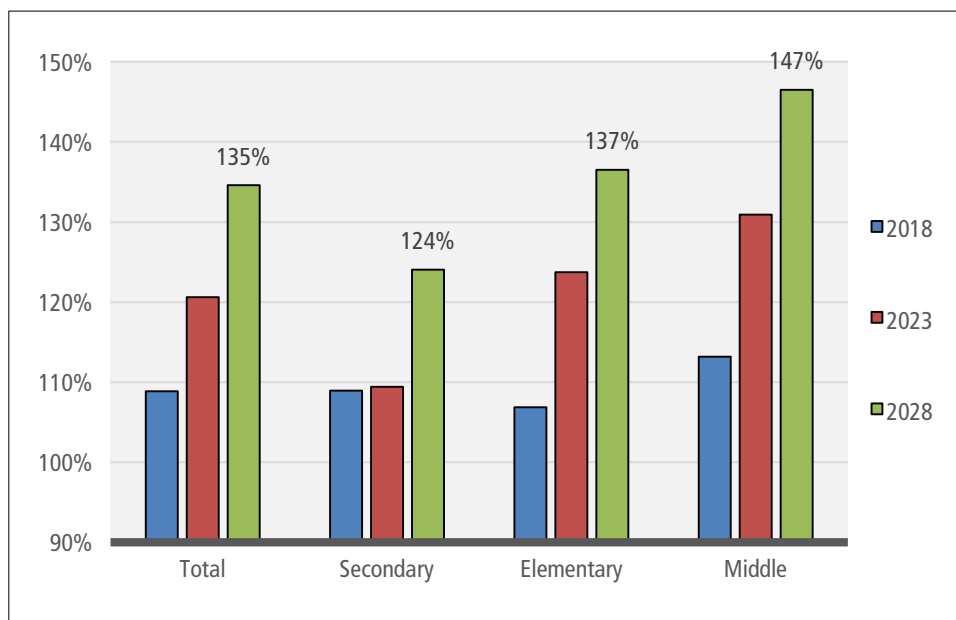
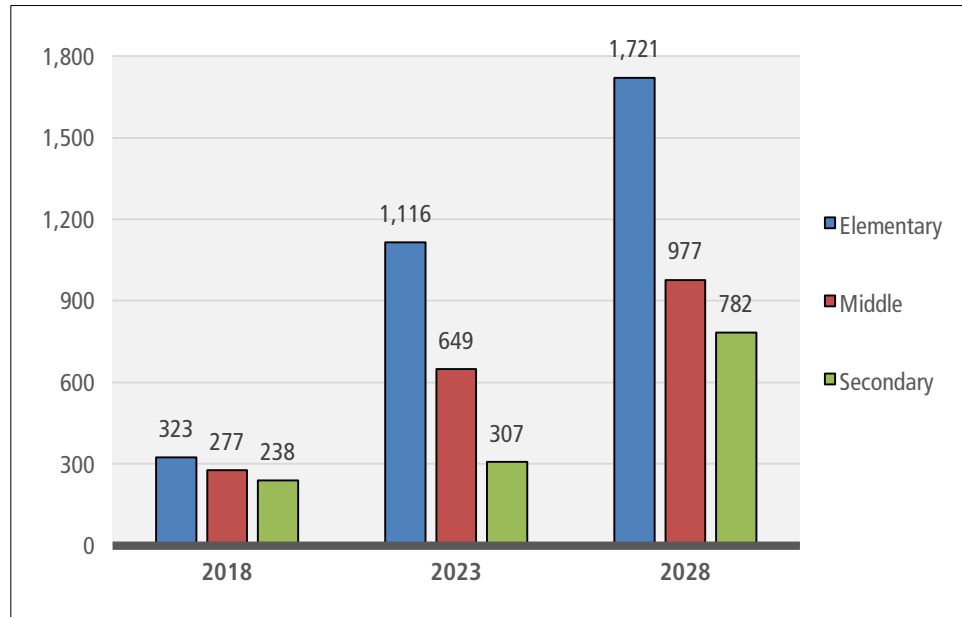


Figure 18 graphically illustrates that the key challenge for SSD over the next few years will be to provide nearly 3,500 spaces, distributed by level as follows:

- ▶ Nearly 800 additional secondary spaces, indicating the need for a new secondary school plus expansions. This shortage was reduced after deducting the 600 spaces to be added to Royal Bay Secondary.
- ▶ Nearly 1,000 additional middle spaces, indicating the need for a new middle school as well as expansions.
- ▶ More than 1,700 additional elementary spaces, indicating the need for four or five new elementary schools as well as expansions.

Figure 18: Anticipated Future Space Shortages by Level



5. EMERGING FACILITIES PLAN

5.1 UTILIZATION ANALYSIS FOR EMERGING PLAN

Figure 19 presents an analysis of capacity utilization after implementing all the projects we have identified as necessary to addressing SSD's significant anticipated space shortfall over the ten-year planning horizon. The utilization profile presented in Figure 19 began with the Baseline Utilization Profile outlined in Figure 16 and added two additional columns to track the changes in operational capacity for 2023 and 2028.

The following comments clarify and expand on the Emerging Plan Utilization Profile presented in Figure 19:

- ▶ Space shortages are shown in red when greater than 20 spaces.
- ▶ Capacity utilization levels are shown in red when 110% and greater.
- ▶ Capacities shown in pink are new schools, in blue are expansions, in green are replacements, and capacities shown in purple are discontinued schools.
- ▶ The numbered notes summarize the shifting enrolments and proposed capital plans for each school. Site implications are shown in red. The notes are on the second page of Figure 19.
- ▶ As with the Baseline Utilization Profile, we have removed Port Renfrew Elementary from the analysis.

The capital plans and other proposed interventions are shown as implemented sometime before 2023 or sometime before 2028. This simplified approach recognizes the uncertainty associated with predicting the timeframe for approvals but still serves to identify those projects with the most urgency.

If all the projects outlined in the emerging plan outlined in Figure 19 were implemented by 2028, the overall capacity utilization of SSD schools would be a very healthy 98%.

Figure 19: Capacity Utilization Profile for the Emerging Plan

School	Capacity			Enrolment		Surplus/Shortage		Utilization		Notes
	2018	2023	2028	2023	2028	2023	2028	2023	2028	
John Muir	198	198	198	194	192	4	6	98%	97%	10
Sooke	264	264	396	264	375	0	21	100%	95%	9
Poirier	374	374	374	372	372	2	2	99%	99%	8
Saseenos	176	0	0							7
New Sooke River		396	396	386	391	10	5	97%	99%	8
Journey	575	575	700	590	686	-15	14	103%	98%	5
Edward Milne	650	650	750	665	748	-15	2	102%	100%	6
Millstream	198	198	220	179	179	19	41	90%	81%	12, 22
Lakewood	352	352	352	293	333	59	19	83%	95%	12
New North Langford		396	396	340	380	56	16	86%	96%	12
Hans Helegsen	220	220	220	209	220	11	0	95%	100%	13
Happy Valley	352	352	352	328	344	24	8	93%	98%	13
New South Langford		396	396	320	390	76	6	81%	98%	13
Willway	242	242	242	232	233	10	9	96%	96%	16
Ruth King	286	286	286	272	283	14	3	95%	99%	16
David Cameron	352	352	352	347	346	5	6	99%	98%	16
John Stubbs Elementary	484	484	484	475	485	9	-1	98%	100%	18
New West Langford		396	396	310	390	86	6	78%	98%	16
Wishart	352	352	352	378	346	-26	6	107%	98%	14
Sangster	198	198	220	249	190	-51	30	126%	86%	15
Colwood	198	198	198	187	194	11	4	94%	98%	
New Royal Bay			264		260		4		98%	24
Crystal View	286	286	286	289	272	-3	14	101%	95%	17
Savory	176	176	264	200	254	-24	10	114%	96%	17, 18
John Stubbs Middle	275	275	275	273	272	2	3	99%	99%	23
Spencer	650	650	700	629	703	21	-3	97%	100%	19, 20
Dunsmuir	600	600	700	577	706	23	-6	96%	101%	19, 20
New Middle		700	700	680	710	20	-10	97%	101%	11
New Secondary			800		760		40		95%	21
Royal Bay	800	1,400	1,400	1,536	1,363	-136	37	110%	97%	3, 21
Belmont	1,200	1,200	1,200	1,356	1,161	-156	39	113%	97%	3, 21
SSD Totals	9,458	12,166	13,869	12,130	13,538	36	331	100%	98%	25
Elementary	4,708	6,116	6,644	5,824	6,429	292	215	95%	97%	25
Middle	2,100	2,800	3,075	2,749	3,077	51	-2	98%	100%	25
Secondary	2,650	3,250	4,150	3,557	4,032	-307	118	109%	97%	25
Sooke Zone	2,237	2,457	2,814	2,471	2,764	-14	50	101%	98%	25
Westshore Zone	7,221	9,709	11,055	9,659	10,774	50	281	99%	97%	25

Figure 19: Capacity Utilization Profile for the Emerging Plan

School	Capacity			Enrolment		Surplus/Shortage		Utilization		Notes
	2018	2023	2028	2023	2028	2023	2028	2023	2028	
A-Elementary	1,012	1,232	1,364	1,216	1,330	16	34	99%	98%	25
B-Elementary	550	946	968	812	892	134	76	86%	92%	25
C-Elementary	572	968	968	857	954	111	14	89%	99%	25
D-Elementary	1,364	1,760	1,760	1,636	1,737	124	23	93%	99%	25
E-Elementary	748	748	1,034	814	990	-66	44	109%	96%	25
F-Elementary	462	462	550	489	526	-27	24	106%	96%	25

Notes

- 1 Shortage shows as **red** if greater than 20. Capacity utilization shows as **red** if 110% or greater.
- 2 Capacities shown in **pink** are new schools, in **blue** are expansions, in **green** are replacements, in **purple** are discontinued.
- 3 Add 600 spaces to Royal Bay. Shift 300 students from Belmont to Royal Bay after Royal Bay expansion.
- 4 Port Renfrew is excluded from analysis.
- 5 Expand Journey by 125 spaces just before 2028.
- 6 Expand Edward Milne by 100 spaces about 2028. **Additional property may be required for expansion.**
- 7 Close Saseenos and sell property to interested party. Shift enrolment to new school. **Surplus site.**
- 8 New Sooke River Elementary to take surplus students from all Sooke area schools. New site already acquired.
- 9 Replace Sooke Elementary with a new and larger school by 2028.
- 10 Could require expansion in future depending on local development.
- 11 New middle school is fed from Spencer, Dunsmuir and Stubbs. New site already acquired (joint site with new elementary).
- 12 New North Langford Elementary takes surplus students from Lakewood and Millstream. Build by 2023.
- 13 New South Langford Elementary to take surplus students mostly from Happy Valley. Build by 2023. **New site needed.**
- 14 Surplus students from go to Sangster.
- 15 Surplus students from Sangster go the New Royal Bay Elementary and perhaps back to expanded replacement for Sangster.
- 16 New West Langford Elementary takes surplus students from Cameron, Willway, King and Stubbs. Site acquired.
- 17 Surplus students from Savory to go to Crystal View.
- 18 Replace Savory with a new and larger school by 2028.
- 19 New Middle is fed with students from Spencer, Dunsmuir and Stubbs. Build by 2023. New site already acquired.
- 20 Expand Dunsmuir and Spencer by 2028.
- 21 New secondary school taking surplus from Belmont and Royal Bay. By 2028. Allow for future expansion. **New site needed.**
- 22 Replace Millstream Elementary with a new and larger school.
- 23 John Stubbs has been separated into middle and elementary components for purposes of this analysis only.
- 24 New Royal Bay Elementary. **Reserved site to be acquired.**
- 25 Analysis focused on achieving close to 100% utilization at planning horizon of 2028.

5.2 NEW SCHOOL SITES

Figure 20 shows the location of five new school sites in the Westshore Zone. The following summarizes the status of these five Westshore sites as well as the new school site in the Sooke Zone:

- ▶ SSD owns the site for the proposed new Sooke River Elementary. It is part of the Sunriver Estates development.
- ▶ SSD owns the site for the proposed new West Langford Elementary as well as the proposed new Middle. The property is part of the Westhills Estates development.
- ▶ SSD owns the site for the proposed new North Langford Elementary.
- ▶ SSD owns a site at the southeast edge of the zone indicated in Figure 20 for the proposed South Langford Elementary, but is pursuing the purchase of better located sites in the middle and northwest edges of the zone indicated. If one of the better sites is purchased, SSD plans to retain the Latoria Creek site for future considerations.
- ▶ SSD is actively looking for a site for the proposed new secondary school in the Westshore Zone.
- ▶ SSD has an option to purchase a site designated as part of the Royal Bay development for the proposed new Royal Bay Elementary.

We have named these new schools according to their location. Actual names for the schools will be chosen later by the Board of Education.

5.3 EMERGING PLAN FOR SECONDARY SCHOOLS

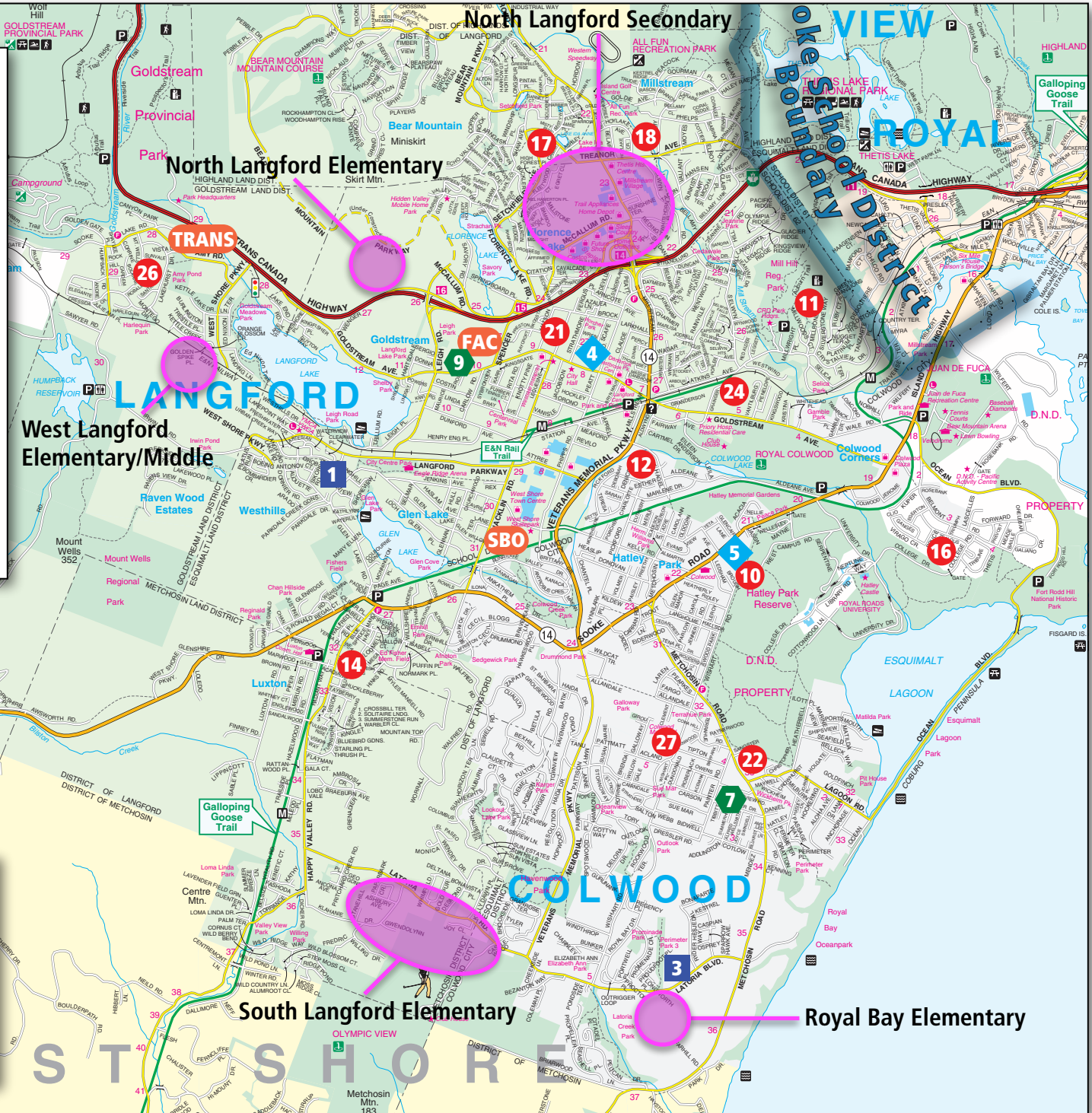
The emerging plan shows the implementation of the approved 600-space expansion to Royal Bay Secondary by 2020.

Edward Milne Secondary will need to be expanded by an estimated 100 spaces within the next ten years. The scope of the expansion project would include renovation to the existing facility. The school likely will require further expansion in the longer term. The most immediate requirement is to determine if additional land is needed to allow expansion, and obtain the additional adjacent property if necessary.

A new secondary school will be required in the Westshore area within the next ten years. Although we show the initial capacity of this fourth secondary school as 800 spaces, we expect that it will require expansion relatively soon after it is built since it will be the focus of growth in secondary enrolment for the Westshore area. It is also likely that enrolment forecasts that are conducted a few years from now will establish the need for more than 800 spaces are required within ten years of the new school opening.

If these three projects were implemented as shown in Figure 19, the four SSD secondary schools would combine for 97% utilization. In the medium term, all three existing secondary schools will need to provide temporary accommodation.

1. Belmont Secondary
3. Royal Bay Secondary
4. Westshore Centre for Learning
5. Westshore Colwood Campus
7. Dunsmuir Middle
9. Spencer Middle
10. Colwood Elementary
11. Crystal View Elementary
12. David Cameron Elementary
13. Hans Helgesen Elementary (not shown)
14. Happy Valley Elementary
16. John Stubbs Elementary-Middle
17. Lakewood Elementary
18. Millstream Elementary
21. Ruth King Elementary
22. Sangster Elementary
24. Savory Elementary
26. Willway Elementary
27. Wishart Elementary



**WESTSHORE
ZONE SCHOOL
SITES**

Project 1845
2018 06 05
Figure 20

**MATRIX
PLANNING
ASSOCIATES**

5.4 EMERGING PLAN FOR MIDDLE SCHOOLS

A new 700-space middle school must be provided in the Westshore area to serve surplus students from Dunsmuir, Spencer and, perhaps, John Stubbs. This proposed new middle school is a very high priority project that we show being implemented by 2023. A site has been acquired to accommodate both the new middle school as well as the proposed new West Langford Elementary.

The emerging plan shows Journey Middle School being expanded by approximately 125 spaces within the next ten years. It is likely that some renovation of the existing facility will be required as part of the expansion project.

The emerging plan presented in Figure 19 indicates that Dunsmuir Middle should be expanded by an estimated 100 spaces and Spencer Middle by approximately 50 spaces within the next ten years. The scope of these expansion projects would include renovation of the existing schools.

Once these four capital projects (one new school and three expansions) are completed, SSD will have four middle schools with 700 spaces and John Stubbs with 275 designated middle school spaces. If these four proposed capital projects were implemented as shown in Figure 19, SSD middle schools would combine to achieve full utilization by 2028. In the medium term, all existing middle schools likely will require temporary accommodation.

It is possible that future planners may conclude that it is better to build a fourth middle school in the Westshore Zone rather than expanding Dunsmuir and Spencer.

5.5 EMERGING PLAN FOR ELEMENTARY SCHOOLS IN SOOKE

A new elementary school is required in the Sooke zone (we call this Zone A in Figure 19) within the next five years. A site has been acquired for this school on the Sunriver Estates. We have called this new 396-space school Sooke River Elementary.

The emerging plan also shows Sooke Elementary being replaced with a larger (396 spaces) new school within the next ten years.

Depending on the scale of residential development in the area, John Muir Elementary may need to be expanded in the future, perhaps to a school in the order of 308 spaces.

The emerging plan outlined in Figure 19 shows Saseenos Elementary as closed with the property sold to an interested party. Students from the current Saseenos catchment would attend the new Sooke River Elementary. This approach would avoid the expense of renovation or replacement of the existing facilities. If Saseenos is retained in the long term, the proposed new Sooke River Elementary and the replacement for Sooke Elementary would both be built with smaller capacities than indicated. Both schools are now shown at the 'ideal' size of 396 spaces.

As outlined in previous long range plans, Port Renfrew Elementary is a unique situation due to the distance and the low enrolment. The building is in poor condition.

If the two capital projects and other changes were implemented as shown in Figure 19, the Sooke area elementary schools would have 98% utilization by 2028.

5.6 EMERGING PLAN FOR ELEMENTARY SCHOOLS IN NORTH LANGFORD

Elementary students in the area north of the Trans-Canada Highway in Langford are served by Lakewood and Millstream Elementary Schools (reference Figure 4). We call this area Zone B in Figures 16 and 19. The baseline utilization profile shown in Figure 16 indicates there will be a combined shortage of nearly 350 spaces at these two schools by 2028.

The emerging plan presented in Figure 19 shows the construction of a new North Langford Elementary with 396 spaces within the next five years. This new school would take students from both Lakewood and Millstream. A new site has been acquired for the proposed new North Langford Elementary.

Replace Millstream Elementary with a new school by 2028. We show this school as being replaced with a slightly larger facility since we are focused on balancing capacity utilization at 2028. In fact, the capacity Millstream would likely be at least 308 spaces given the anticipated growth in the area.

As shown in Figure 8, the replacement of Millstream Elementary is SSD's highest priority from a building condition perspective. In this context, we could consider the replacement of Millstream Elementary as a higher priority than the construction of the proposed new North Langford Elementary. We have chosen to list the new North Langford Elementary as the top priority since it will provide the most additional spaces for students north of the highway. However, Millstream Elementary should be replaced as soon as possible as well. If Millstream Elementary is replaced soon, it should be built with a capacity that anticipates future enrolment growth in the area.

If the two capital projects are implemented as shown in Figure 19, the North Langford area (Zone B) elementary schools would have 92% utilization by 2028.

5.7 EMERGING PLAN FOR ELEMENTARY SCHOOLS IN SOUTH LANGFORD

Much of the growth in South Langford (Zone C in Figure 19) is focused on Happy Valley Elementary.

The emerging plan presented in Figure 19 shows the construction of a new South Langford Elementary with 396 spaces within the next five years. This new school would take surplus students from both Happy Valley and Hans Helgesen.

As mentioned, SSD is pursuing the purchase of a site on or near Latoria Road for this proposed new school.

The emerging plan presented in Figure 19 shows that Zone C will have full utilization by 2028. Additional growth beyond 2028 could be accommodated in the proposed new Royal Bay Elementary or by expanding either or both Hans Helgesen and the new South Langford Elementary.

In addition, Hans Helgesen will need to be modernized over the next several years.

5.8 EMERGING PLAN FOR ELEMENTARY SCHOOLS IN WEST LANGFORD

Most of the anticipated enrolment increases in West Langford (Zone D in Figures 16 and 19) will be at David Cameron. In addition, there will be considerable enrolment growth at John Stubbs which, as a single-track French Immersion school, attracts students from throughout the district.

The emerging plan presented in Figure 19 proposes providing a new West Langford Elementary with 396 spaces within the next five years. This new school would take surplus students from Willway and Ruth King as well as David Cameron and John Stubbs.

As mentioned, SSD owns the site for the proposed new West Langford Elementary as well as the proposed new Middle. The property is part of the Westhills Estates development.

Figure 19 illustrates that, once the new West Langford Elementary is built, Zone D will have full utilization by 2028. Additional growth beyond 2028 could be accommodated by expanding David Cameron, Willway, Ruth King or the new West Langford Elementary.

In addition, Willway and Ruth King will need to be modernized over the next several years.

5.9 EMERGING PLAN FOR ELEMENTARY SCHOOLS IN COLWOOD

Most of the anticipated space shortage in Colwood schools (Royal Bay and North Colwood in Figure 12) will be at Sangster and Savory. These are Zones E and F in Figures 16 and 19.

The emerging plan outlined in Figure 19 shows that the construction of a new Royal Bay Elementary will address the space shortage at Sangster, while a larger replacement facility will accommodate enrolment increases at Savory. Both capital projects will be implemented in the medium term between 2023 and 2028. By 2028, the schools in the Colwood area will have full utilization.

It is likely that the capacities of both the new Royal Bay Elementary and the replacement for Savory will be larger than the 264 spaces now shown for each school, since planners will be looking well beyond 2028 to determine the best enrolment forecasts for schools in the area. We speculate that the new Royal Bay Elementary will be built at 352 spaces and the Savory replacement capacity will be set at 308 spaces.

In addition, Wishart will need to be modernized over the next several years.

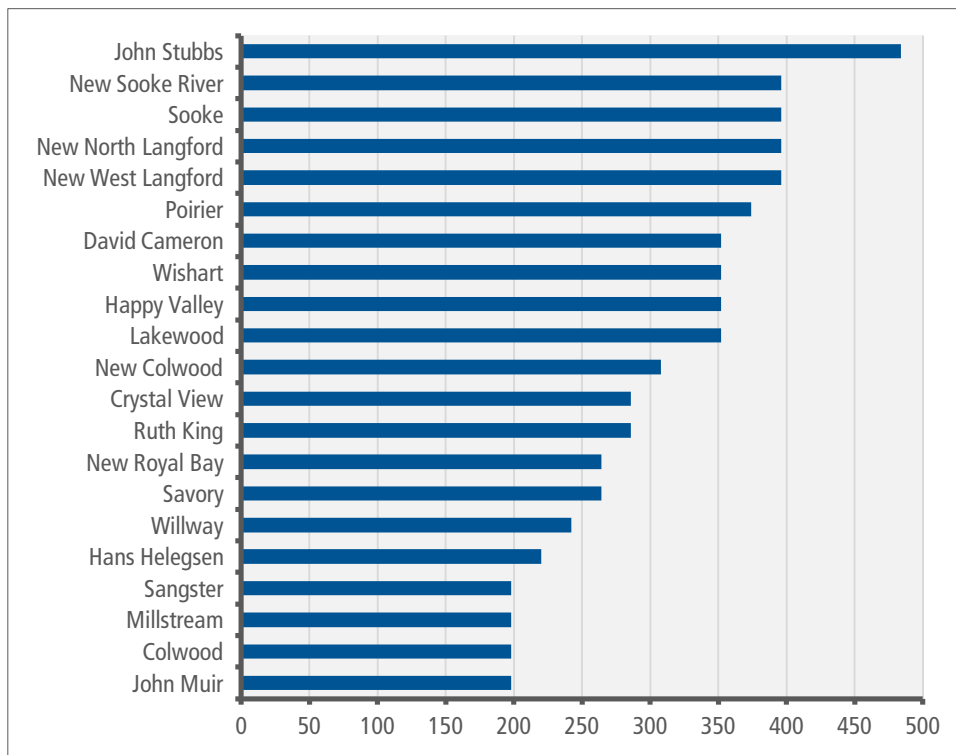
5.10 SUMMARY OF EMERGING FACILITIES PLAN

If all the projects outlined in the emerging facilities plan documented in Figure 19 were implemented by 2028, many desired goals would have been achieved:

- ▶ There would be essentially full utilization (Figure 19 shows 98%) of all SSD schools, assuming the enrolment forecasts are accurate.

- ▶ As illustrated in Figure 21, fourteen of SSD’s 21 elementary schools would be in the optimal 264-396 space range.
- ▶ The building condition of all the schools would be rated Excellent or Good. Many of the schools would be new. All students would be going to school in modern facilities that are safe, healthy, comfortable and functional.

Figure 21: Capacities of Elementary Schools with Emerging Plan



5.11 PRELIMINARY PROJECT PRIORITIES

Figure 22 summarizes the twenty building projects that form the facilities plan for SSD over the next decade or so. These projects are described in the previous five sections and reflected in the capacity utilization profile for the emerging plan presented in Figure 19.

Figure 22 presents the projects in order of timing:

- ▶ ‘Short’ for projects that should be implemented soon and certainly within the next five years.
- ▶ ‘Medium’ for projects that should be implemented in the next 5-10 years, but that may require land acquisition or planning activities sooner.

In summary, the top building project priorities for SSD are to:

- ▶ Build the new middle school and the new West Langford Elementary on a site already acquired.
- ▶ Acquire a site and build the new South Langford Elementary.

- ▶ Acquire a site for a new secondary school in Westshore. This is a very high priority due to the need to act as soon as possible to acquire a suitable site at an acceptable price. The design and construction of the school itself is not as urgent.
- ▶ Build the new North Langford Elementary on a site already acquired.
- ▶ Build the new Sooke River Elementary on a site already acquired.
- ▶ Replace Millstream Elementary with a new and larger school.

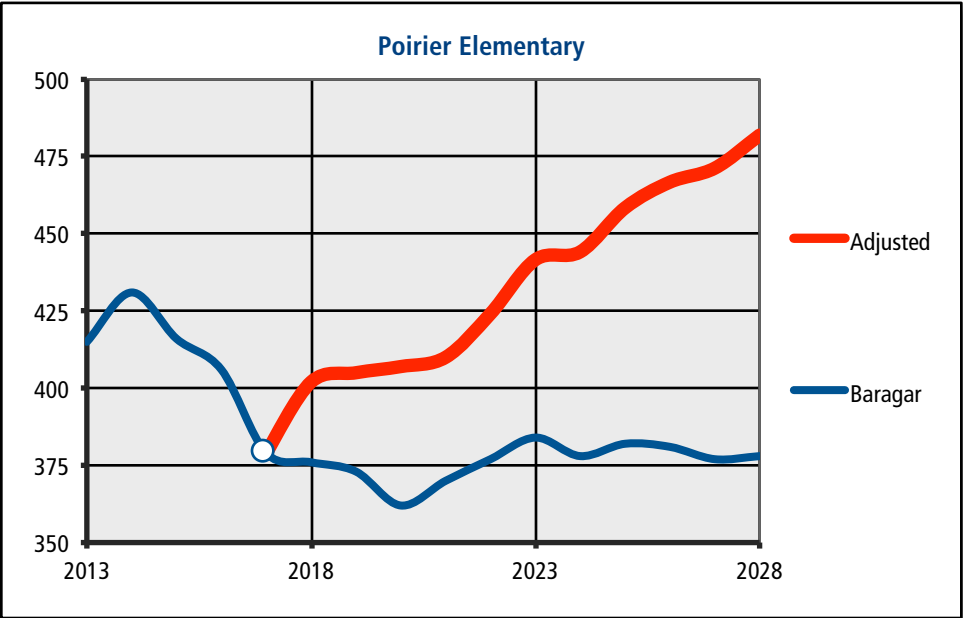
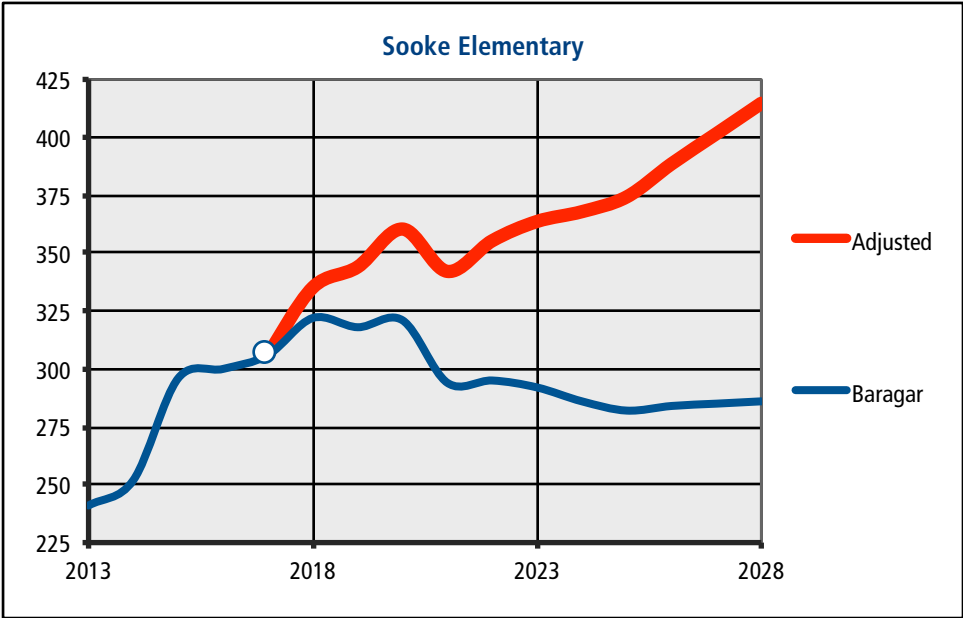
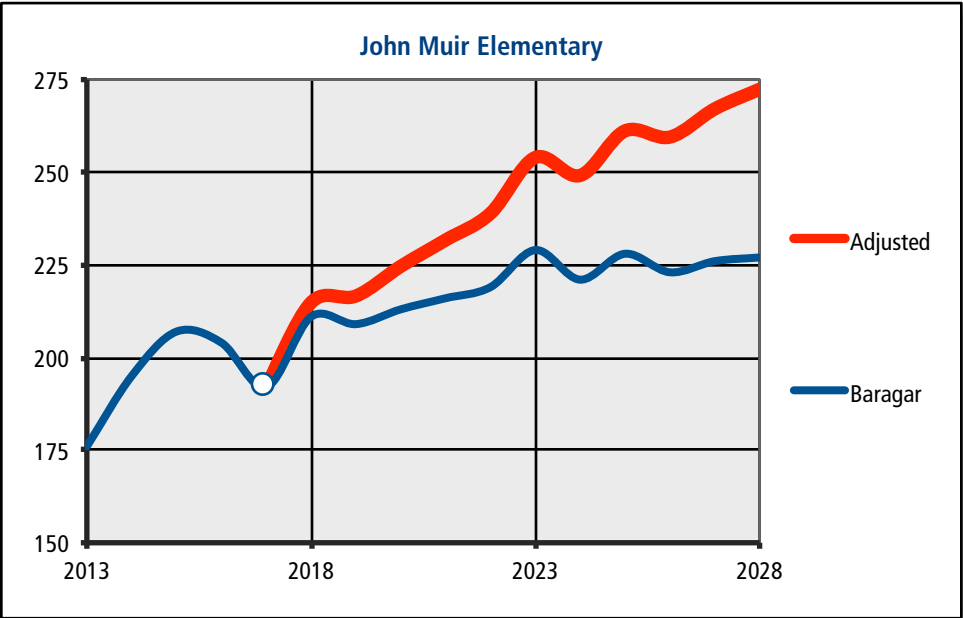
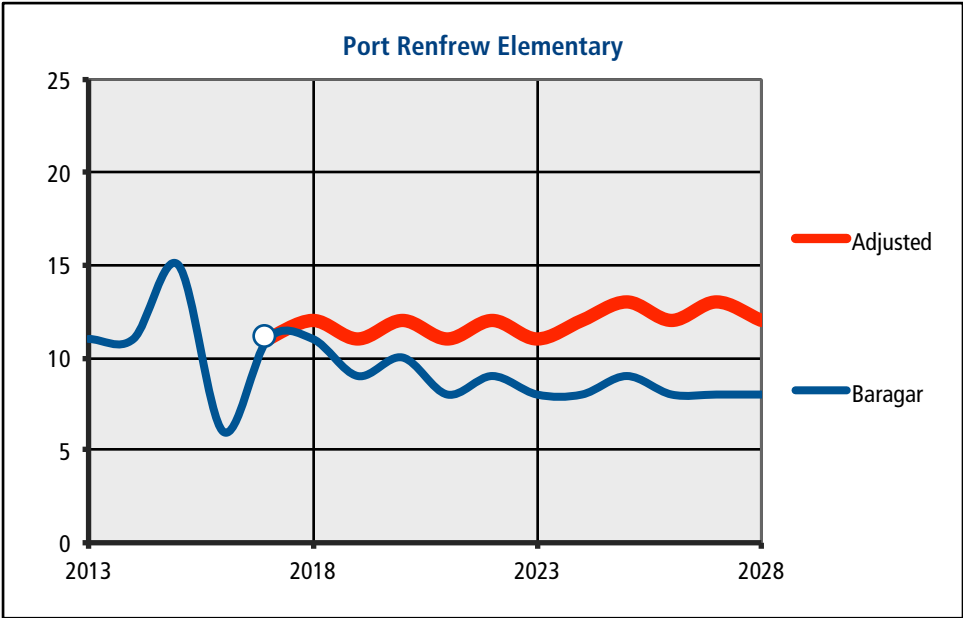
Figure 22: Preliminary List of Building Projects from Emerging Plan

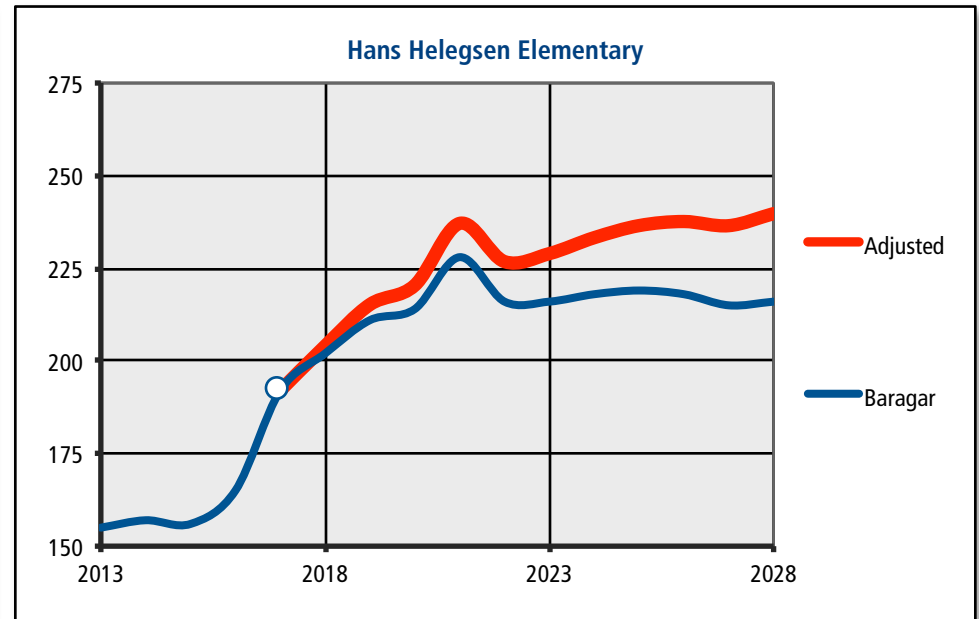
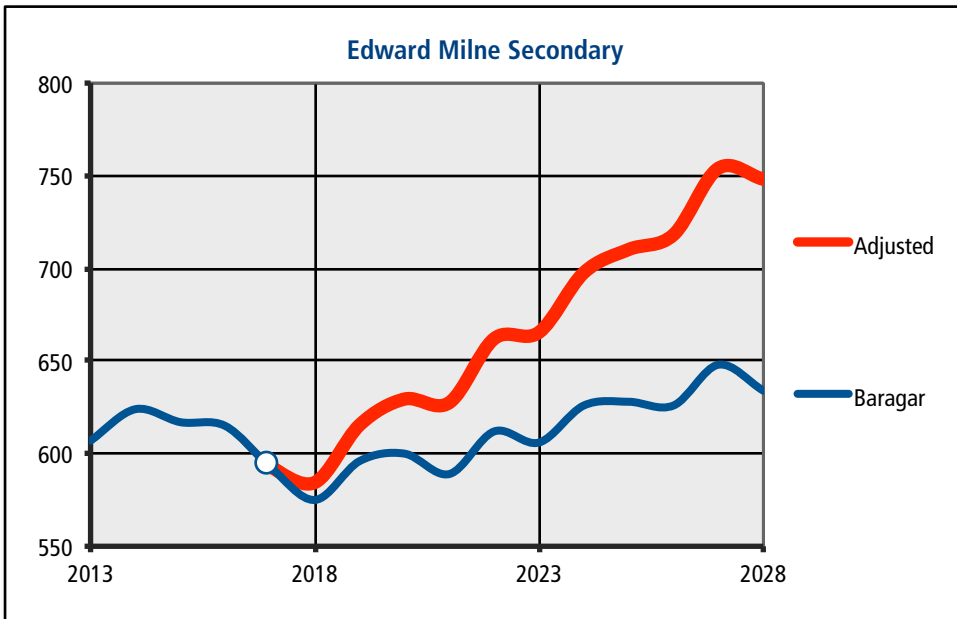
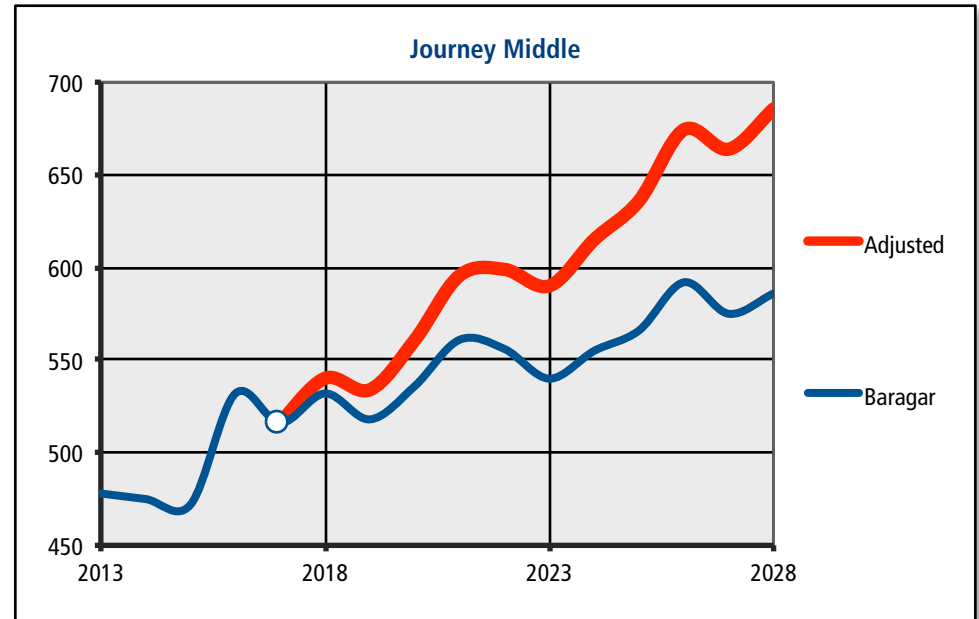
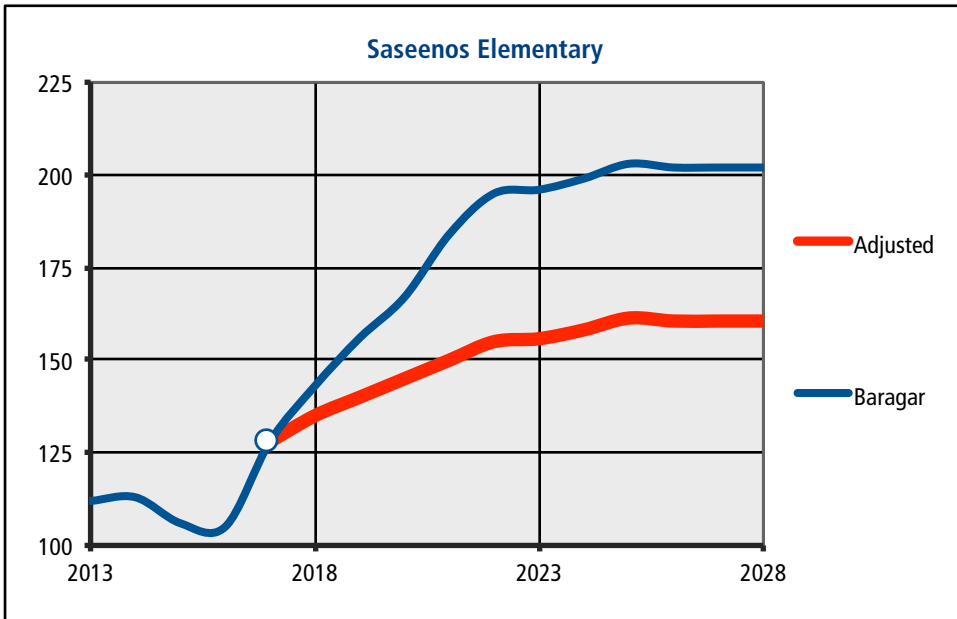
	School	Type of development	Property	Timing
1	New Middle	New school	Site acquired	Short
2	New West Langford Elementary	New school	Site acquired	Short
3	New South Langford Elementary	New school	New site needed	Short
4	New North Langford Elementary	New school	Site acquired	Short
5	New Sooke River Elementary	New school	Site acquired	Short
6	Millstream Elementary	Replacement school	Existing site	Short
7	New Secondary	New school	New site needed	Medium
8	New Royal Bay Elementary	New school	Designated site to be purchased	Medium
9	Sooke Elementary	Replacement school	Existing site	Medium
10	Journey Middle	Addition and renovation	Existing site	Medium
11	Edward Milne Secondary	Addition and renovation	Additional property needed	Medium
12	Savory Elementary	Replacement school	Existing site	Medium
13	Sangster Elementary	Replacement school	Existing site	Medium
14	Spencer Middle	Addition and renovation	Existing site	Medium
15	Dunsmuir Middle	Addition	Existing site	Medium
16	John Muir Elementary	Renovation or replacement	Existing site	Medium
17	Willway Elementary	Modernization	Existing site	Medium
18	Ruth King Elementary	Modernization	Existing site	Medium
19	Wishart Elementary	Modernization	Existing site	Medium
20	Hans Helgesen	Modernization	Existing site	Medium

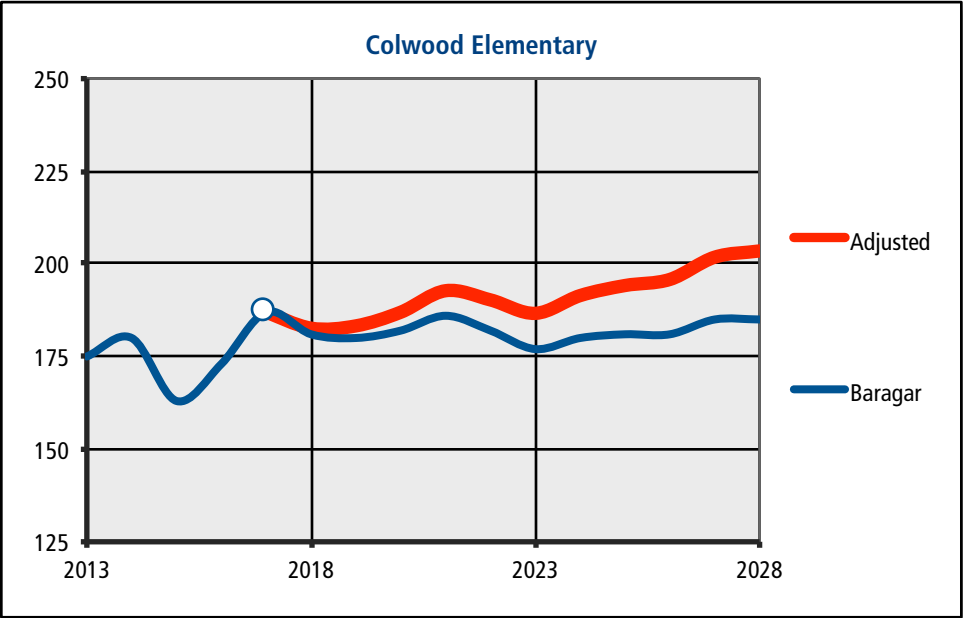
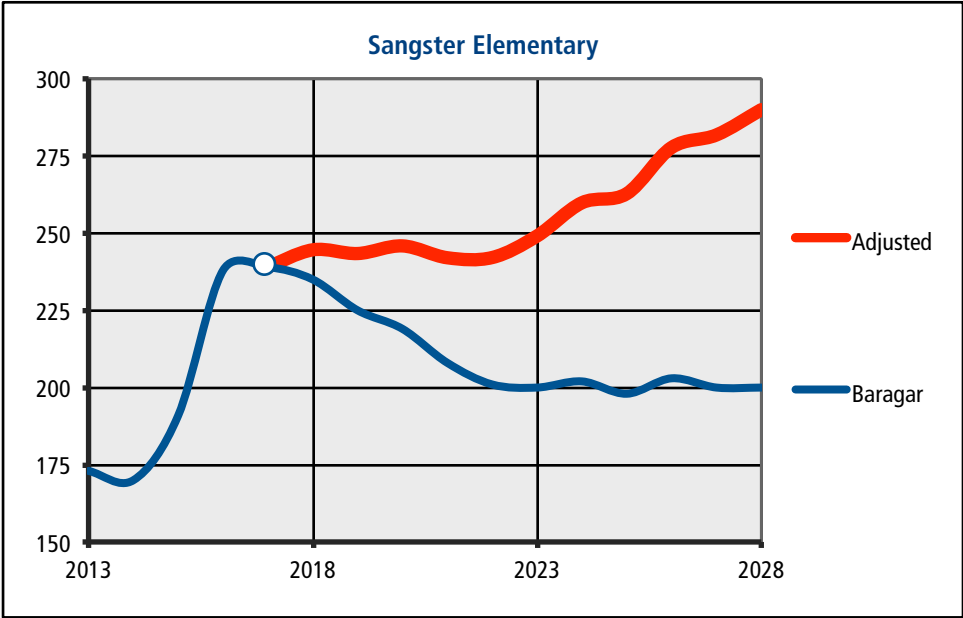
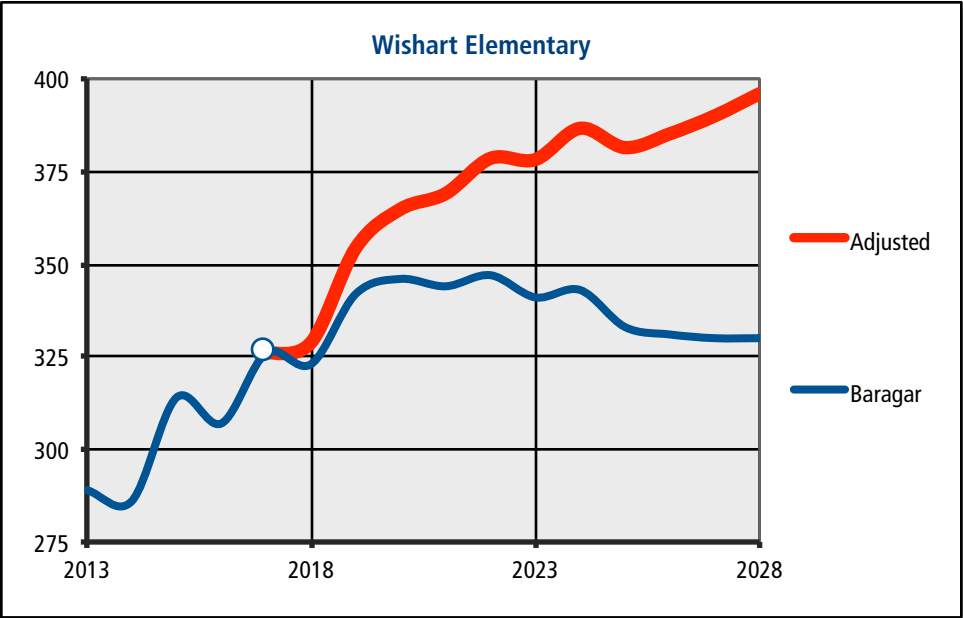
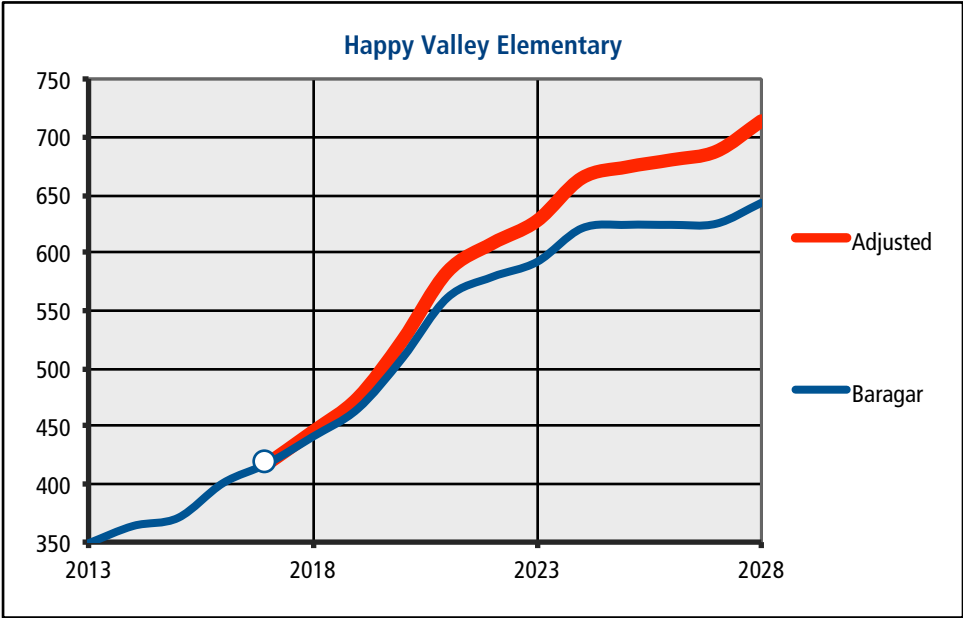
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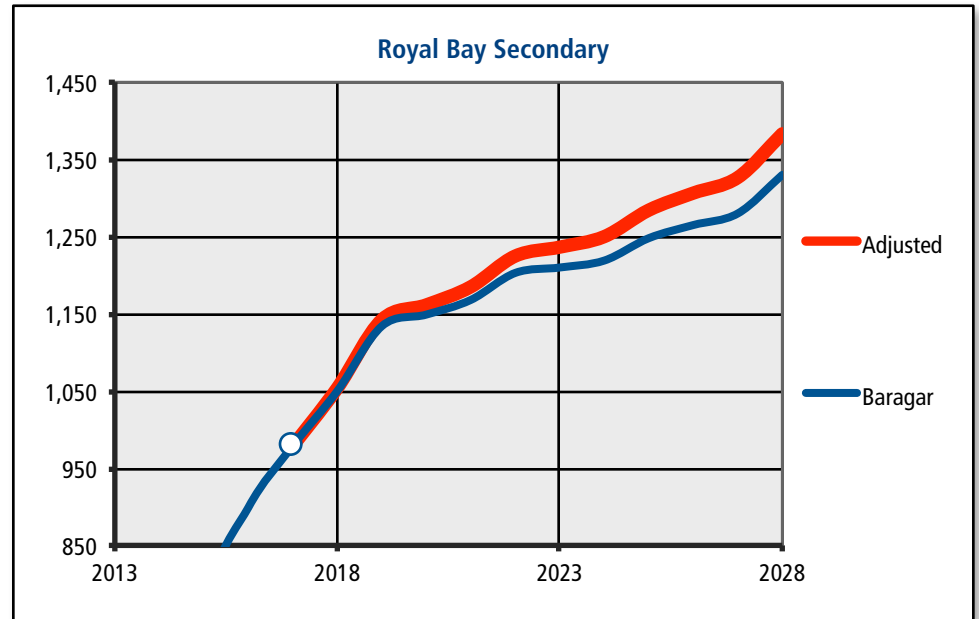
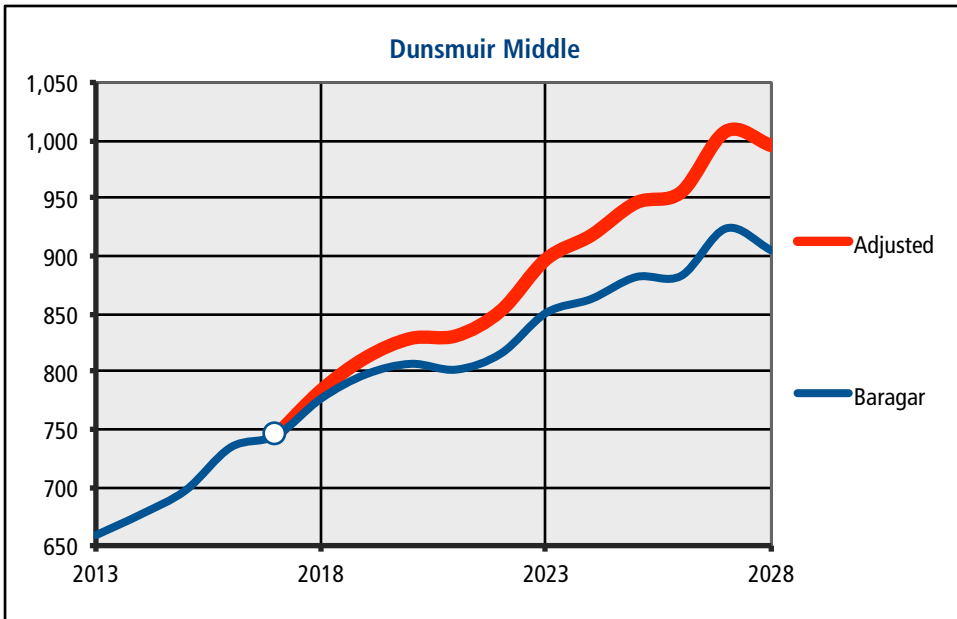
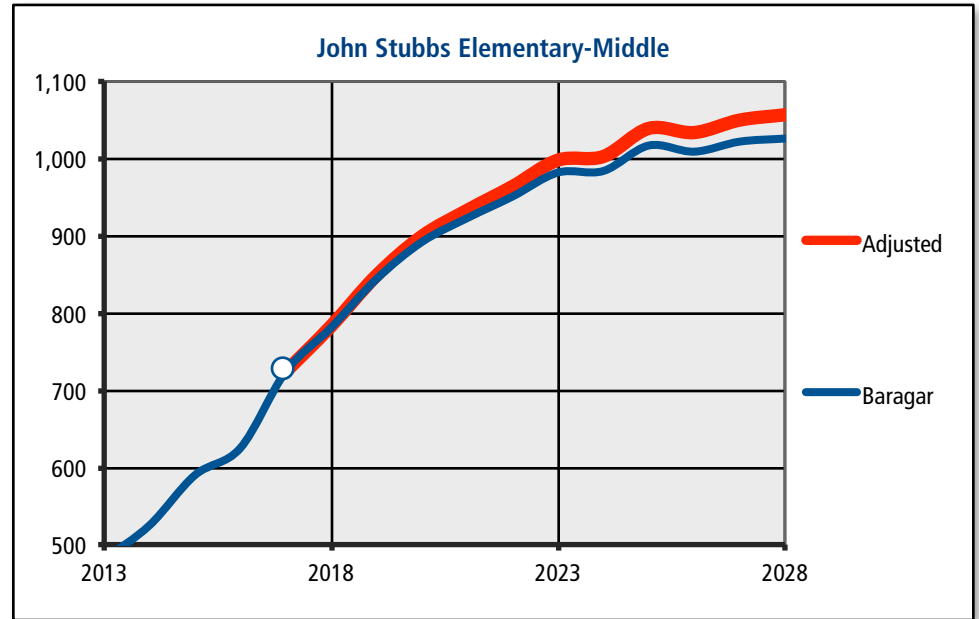
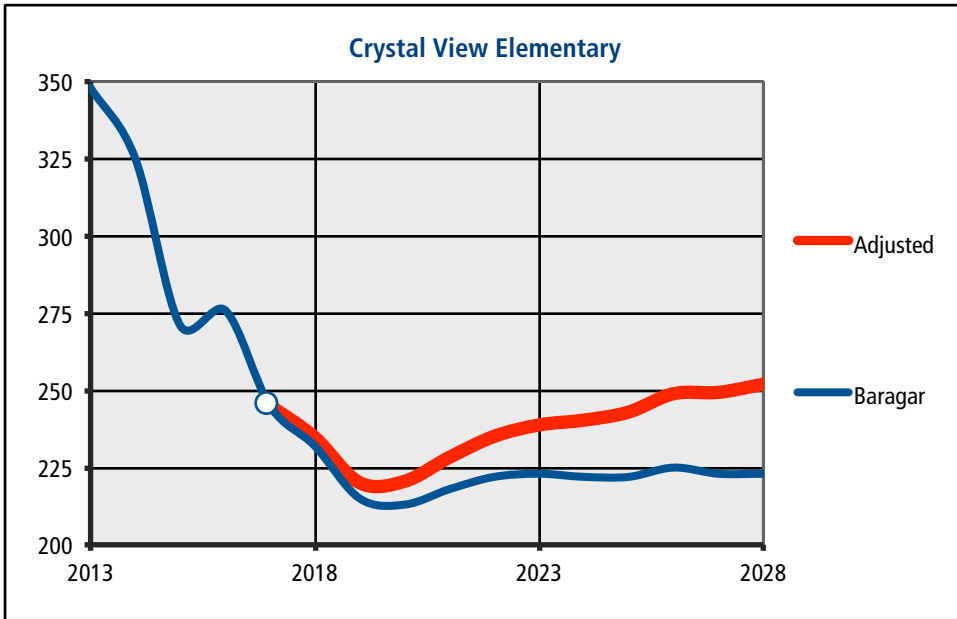
APPENDIX

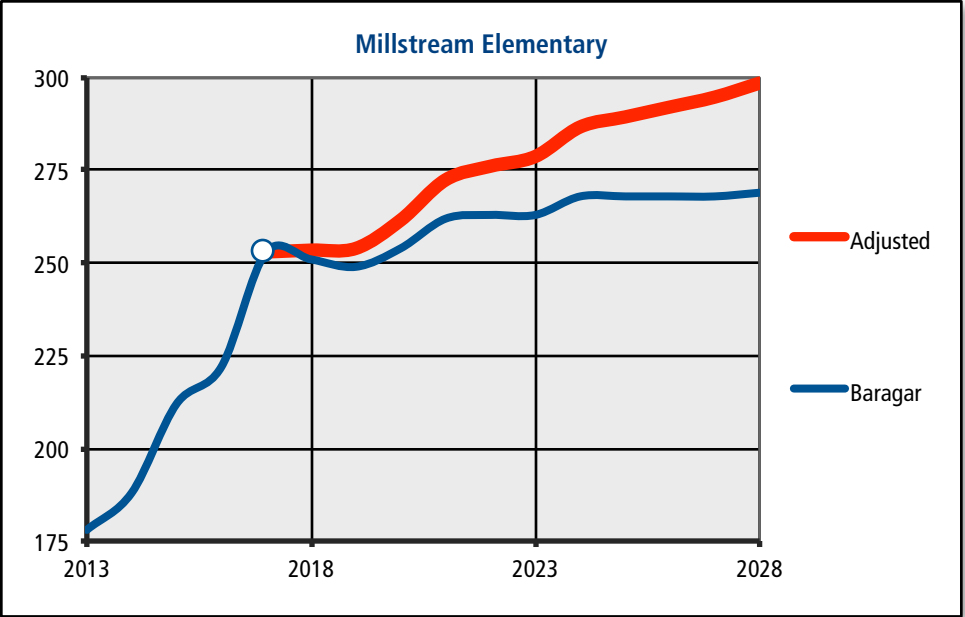
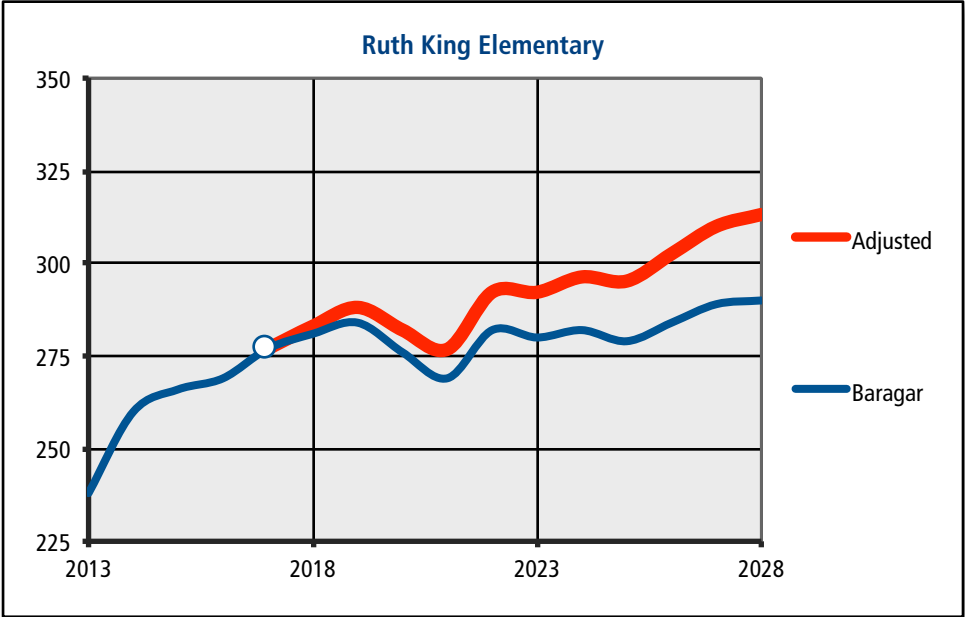
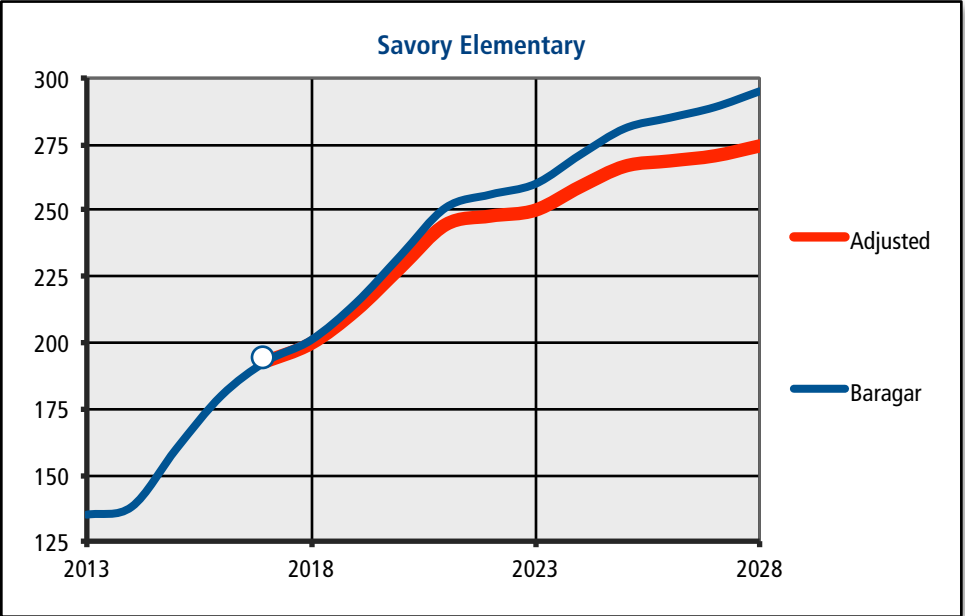
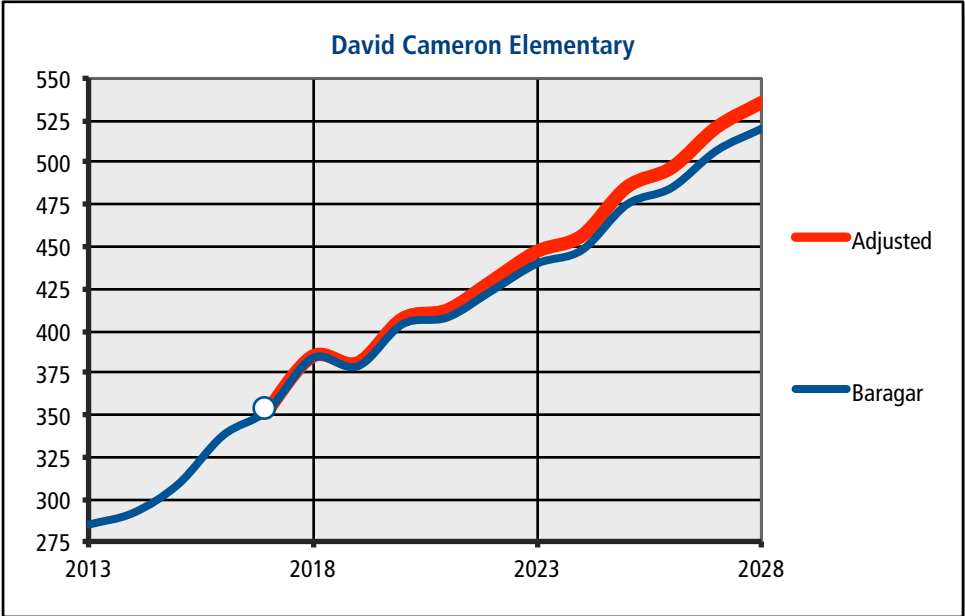
ENROLMENT FORECASTS FOR EACH SCHOOL

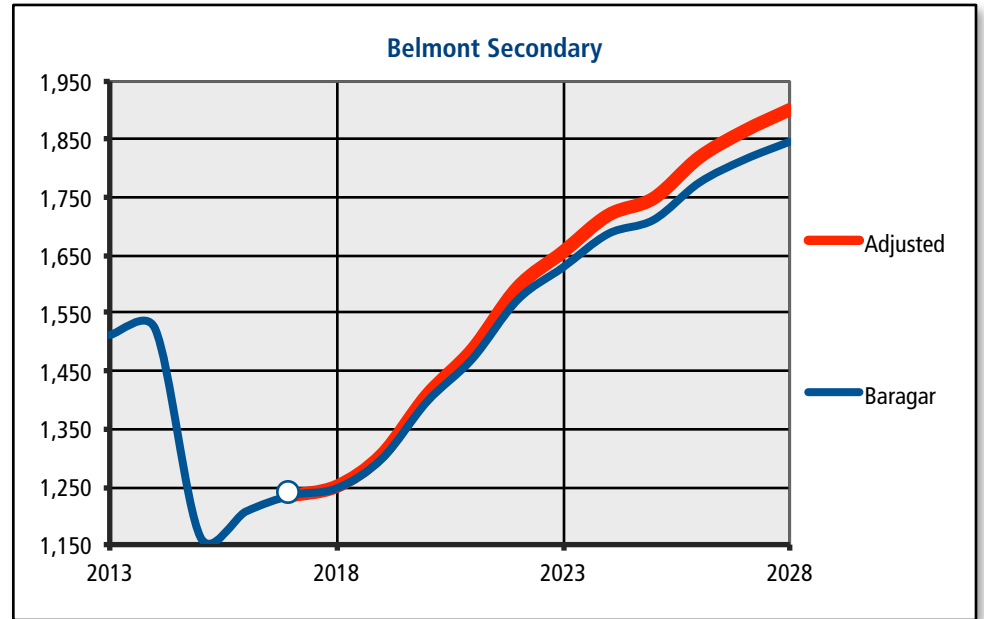
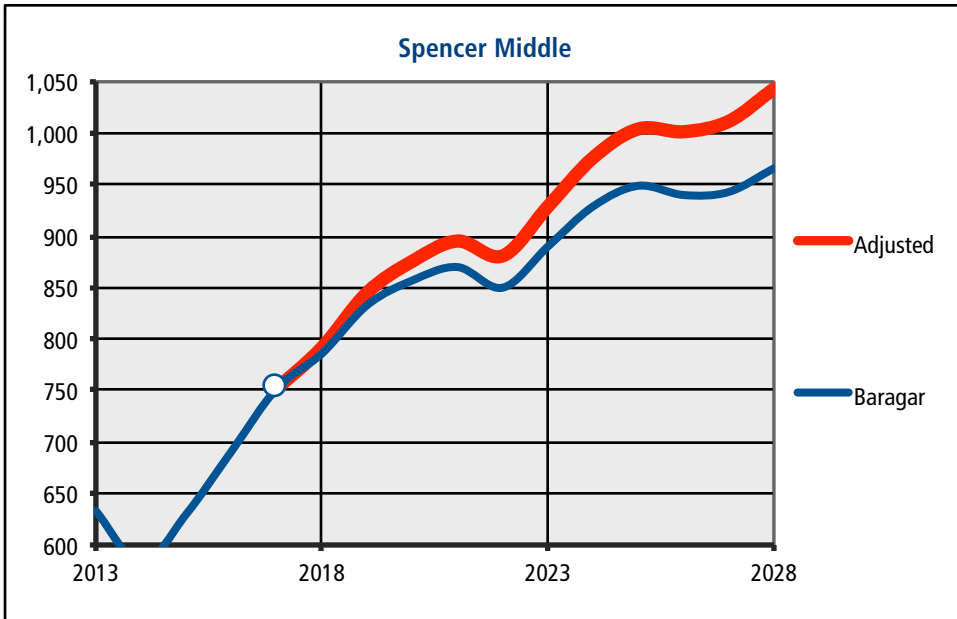
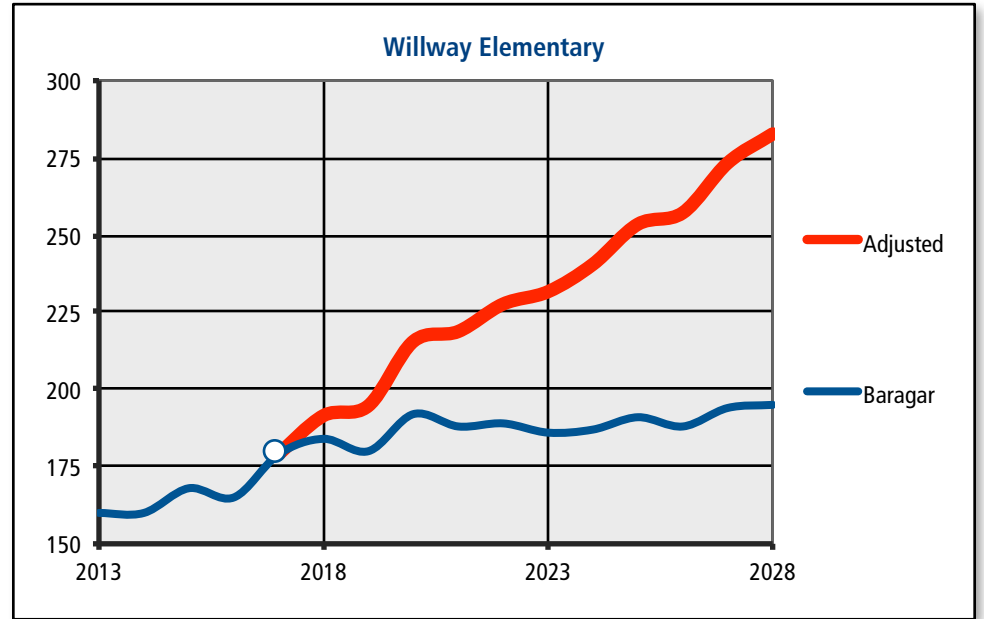
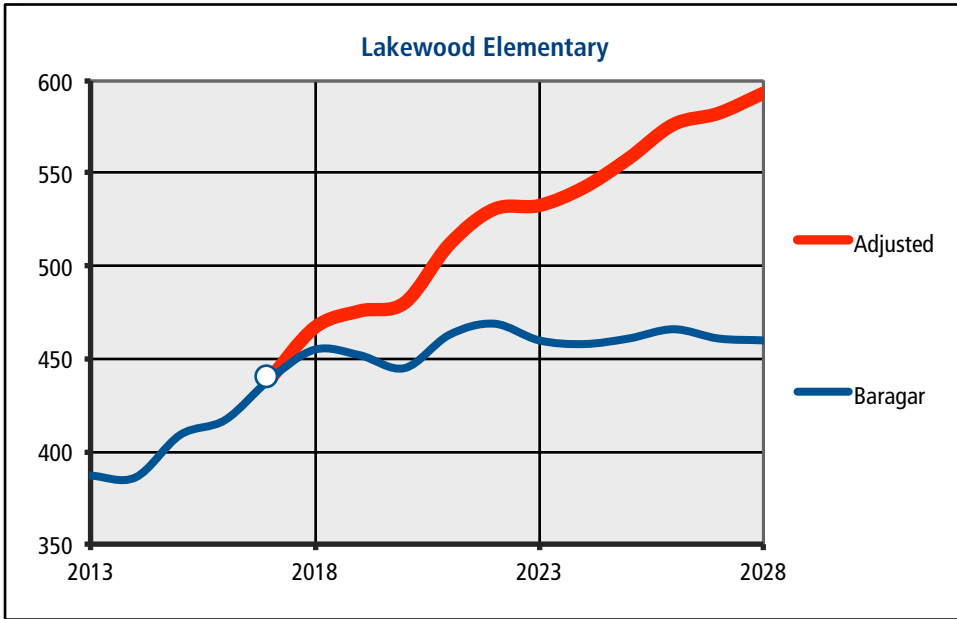












B

APPENDIX

SUMMARY ENROLMENT FORECAST

Summary Enrolment Forecast for SSD Schools

School	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Belmont Secondary	1,235	1,250	1,305	1,408	1,487	1,594	1,656	1,719	1,748	1,819	1,865	1,901
Colwood Elementary	187	183	183	187	193	190	187	191	194	196	202	204
Crystal View Elementary	245	235	220	221	228	235	239	240	243	249	249	252
David Cameron Elementary	353	385	381	407	412	430	447	457	485	497	521	536
Dunsmuir Middle	745	784	813	829	831	853	897	918	946	955	1,008	996
Edward Milne Secondary	593	584	616	629	628	662	665	698	710	718	754	748
Hans Helegsen Elementary	192	204	215	220	237	227	229	233	237	238	237	240
Happy Valley Elementary	418	445	474	524	583	608	628	664	674	680	688	714
John Muir Elementary	192	215	217	225	232	239	254	249	261	259	267	272
John Stubbs Elementary-Middle	724	783	849	899	933	964	998	1,003	1,039	1,034	1,050	1,057
Journey Middle	516	540	534	561	596	599	590	615	636	674	664	686
Lakewood Elementary	439	467	476	480	512	531	533	543	558	577	583	593
Millstream Elementary	253	254	254	262	272	276	279	287	289	292	295	299
Poirier Elementary	379	402	405	407	410	424	442	444	458	467	471	482
Port Renfrew Elementary	11	12	11	12	11	12	11	12	13	12	13	12
Royal Bay Secondary	979	1,054	1,142	1,162	1,185	1,225	1,236	1,250	1,284	1,306	1,327	1,383
Ruth King Elementary	277	283	288	282	277	292	292	296	295	303	310	313
Sangster Elementary	239	245	243	246	242	242	249	260	263	278	282	290
Saseenos Elementary	128	135	140	145	150	155	156	158	161	161	161	161
Savory Elementary	193	200	212	229	245	248	250	259	267	269	271	274
Sooke Elementary	306	335	344	360	342	355	364	368	374	389	402	415
Spencer Middle	752	792	845	876	895	881	929	976	1,004	1,002	1,012	1,043
Willway Elementary	179	192	195	216	219	228	232	241	254	257	273	283
Wishart Elementary	326	329	354	365	369	379	378	387	381	385	390	396
SSD Schools	9,861	10,308	10,716	11,152	11,489	11,849	12,141	12,468	12,774	13,017	13,295	13,550



APPENDIX

ELIGIBLE SCHOOL SITES PROPOSAL



**MATRIX
PLANNING
ASSOCIATES**

ELIGIBLE SCHOOL SITES PROPOSAL

To: School District 62 (Sooke)
From: Matrix Planning Associates
Date: 2018 06 05
Subject: 2018 Update, Eligible School Sites Proposal, Sooke School District

THE SCHOOL SITES ACQUISITION CHARGE

The School Sites Acquisition Charge (SSAC) is a charge per dwelling unit paid by residential developers. The charge is collected by local government and transferred to school boards. The money collected is used to help pay for new school sites resulting from new residential development.

The SSAC Implementation Guide outlines the principles underlying the SSAC legislation, highlights those developments that are exempt from the charge, and provides a framework for the process to be followed to set the charge by school boards and their local governments.

This document, the Eligible School Sites Proposal (ESSP), encompasses Steps 1 to 3 of the process for implementing SSAC in the Sooke School District (SSD). Step 1 estimates the number of eligible residential development units that will be built in SSD over the next eleven years. Step 2 estimates the number of students that are expected to live in the new eligible development units by 2028, the end of the planning horizon.

Step 3 is the preparation of the ESSP and incorporates all the information required to calculate SSAC for SSD including:

- ▶ Enrolment estimates to 2028.
- ▶ The definition of new schools and new school sites required in response to anticipated enrolment growth.
- ▶ Estimates of the cost of new land for new school sites.

CONTEXT FOR THE 2011 UPDATE

We prepared the first ESSP for SSD in 2001. That document established a base rate of \$558 as the average charge per unit. The actual charge varied from \$419 to \$698 depending on the density of the new residential development. The 2001 ESSP formed the basis for an agreement with all SSD municipalities.

Since establishing the initial SSAC, we have prepared two updates:

- ▶ In 2007, we concluded that the average charge per unit should be increased slightly to \$578.
- ▶ In 2011, the updated information indicated that the average charge per unit should be increased to \$901.

The purpose of the current 2018 update is to provide the background analysis to allow SSD and the municipalities to modify the existing SSAC to a rate that more

closely corresponds to our best estimate of future residential development as well as the need for new school sites. The data for much of the analysis outlined in this update are drawn from SSD's 2018 Update of the Long Range Facilities Plan ('LRFP 2018'). Enrolment forecasts for LRFP 2018 were based on actual enrolments in September 2017. As a result, we consider 2017 the base year for this analysis of the SSAC.

STUDENTS FROM NEW RESIDENTIAL DEVELOPMENT

Figure 1 shows the results of Steps 1 and 2 in the process to establish the SSAC.

Figure 1: Estimate of Students from Eligible Development Units

Type of unit	Housing units	Yield rate	EDU students
Single Detached	4,300	0.494	2,123
Townhouse	2,560	0.370	946
Apartment	3,940	0.153	602
Total housing units	10,800	0.340	3,671
Sunriver exemption	300		
Net housing units	10,500		

The estimated number of housing units is taken from Section 3.2 in LRFP 2018. Figure 1 summarizes the estimated number of units for the eleven-year period 2017 to 2028. The yield rates in Figure 1 are as outlined in LRFP 2018.

The net number of housing units subtracts the estimated housing units for the Sunriver development in Sooke. This is because the Sunriver developer provided a school site in lieu of paying SSAC for the project.

COST OF NEW SCHOOL SITES

Figure 2 lists the proposed capital projects that require new sites to meet the estimate student demand by 2028. Our definition of long-term capacity appraised the likelihood that the school may need to be expanded in the future. Our estimate of property needed considered the nature of the development being considered as well as the specific circumstances of existing sites (in the case of expansions).

The list of sites required does not include the following recently acquired properties:

- ▶ John Stubbs Elementary-Middle.
- ▶ Royal Secondary.
- ▶ Belmont Secondary.
- ▶ Proposed new Sooke River Elementary since that site has been acquired as part of an arrangement with the developer of Sunriver Estates.

- ▶ West Langford site for the proposed new West Langford Elementary and the proposed new middle school, since this site has been acquired and payment included a contribution from the SSAC fund.

Figure 2: Capital Projects Requiring New Sites

Name of Project	Scope of Project	Initial Capacity	Planned Capacity	Existing Site Area	Allowable Area (ha)	Property Needed
New Royal Bay Elementary	New school	286	396	n/a	2.5	2.5
New South Langford Elementary	New school	396	484	n/a	2.8	2.8
New North Langford Elementary	New school	396	484	n/a	2.8	2.8
New Secondary	New school	800	1,200	n/a	5.6	5.6
Edward Milne expansion	Expansion	750	1,200	4.6	5.6	2.0
Total		2,628	3,764			15.7

We estimate that it will cost approximately \$49 million to acquire the properties listed in Figure 2, qualified as follows:

- ▶ The cost estimates are preliminary. Actual costs will depend on many factors including market conditions.
- ▶ The estimates are for land acquisition and may include the cost of site preparation as well as the cost to provide servicing to the property.
- ▶ All estimates are in 2018 dollars and do not account for future escalation of land prices.
- ▶ The costs for all required properties are estimated at market values even in circumstances where the land may be donated or result from some other business arrangement.

PENT-UP AND FUTURE DEMAND

Figure 3 presents the basic method of calculating pent-up demand for SSD as of September 2017. The enrolment and capacities do not include alternate programs or home schooling students.

Figure 3: Basic Method to Estimate Pent-up Demand

2017 Enrolment	9,861
2017 Operating Capacity	9,524
Pent-up Demand	337

Figure 4 presents the overall estimate of increased enrolment for SSD. The data for these tables is drawn from LRFP 2018. The enrolment estimates used in Figures 3 and 4 is summarized in Appendix B of LRFP 2018. Enrolments exclude students in alternative programs as well as international students.

Figure 4: Enrolment Forecast for SSD

Current Year	2017
Current Enrolment	9,861
Year Eleven	2028
Year Eleven Enrolment	13,548
Eleven-Year Increase	3,687

SSAC CALCULATIONS

Figure 5 outlines the calculations necessary to establish the average SSAC per eligible residential unit. All data in Figure 5 are from earlier figures in this report.

Figure 5: Developer Share of New Site Costs

Factor	Estimate
1 Eleven-Year Enrolment Increase	3,687
2 Plus Pent-up Demand	337
3 Net Increase Requiring New Facilities	4,024
4 Students from Eligible Development Units	3,671
5 Enrolment Increase Proportion	92%
6 New Development Proportion	91%
7 Estimated Net Cost of New Property	\$49,000,000
8 Attributable to Eligible Development Units	\$44,697,496
9 Proportion to be Paid through SSAC	35%
10 Estimated Share to be Paid through SSAC	\$15,644,124
11 Total Eligible Development Units	10,500
12 Average Charge per Unit (Base Rate)	\$1,490

Figure 6 outlines the preliminary calculation of the actual SSAC, as it would be applied to each type of dwelling unit. All calculations of SSAC are rounded to the nearest dollar. Since the base rate is higher than the maximum charge, the maximum charge of \$1,000 per low density residential applies.

Figure 6: School Site Acquisition Charge

Density	Factor	Unit Charge	Maximum Charge
Low	1.250	\$1,000	\$1,000
Medium low	1.125	\$900	\$900
Medium	1.000	\$800	\$800
Medium high	0.875	\$700	\$700
High	0.750	\$600	\$600
Base Rate		\$1,490	



The densities are defined in the SSAC regulations as follows:

- ▶ Low density is up to 21 units per hectare.
- ▶ Medium/low density is 21 to 50 units per hectare.
- ▶ Medium density is 51 to 125 units per hectare.
- ▶ Medium/high density is 126 to 200 units per hectare.
- ▶ High density is more than 200 units per hectare.